Form 3160-3 FORM APPROVED (September 2001) OMB No. 1004-0136 Expires January 31, 2004 UNITED STATES Lease Serial No. DEPARTMENT OF THE INTERIOR UTU-39713 BUREAU OF LAND MANAGEMENT 6. If Indian, Allottee or Tribe Name APPLICATION FOR PERMIT TO DRILL OR REENTER 7. If Unit or CA Agreement, Name and No. la. Type of Work: DRILL REENTER Sundance Unit 8. Lease Name and Well No. ☑ Oil Well ☐ Gas Well ☐ Other Single Zone Multiple Zone 1b. Type of Well: Sundance Federal B-12-9-17 Name of Operator **Newfield Production Company** 3a. Address 3b. Phone No. (include area code) 10. Field and Pool, or Exploratory Route #3 Box 3630, Myton UT 84052 (435) 646-3721 Location of Well (Report location clearly and in accordance with any State requirements.\*) 11. Sec., T., R., M., or Blk. and Survey of Area // NW/NE 451' FNL 1939' FEL Sec. 12, T9S R17E At proposed prod. zone 50' FNL 1160' FEL 12. County or Parish 14. Distance in miles and direction from nearest town or post office\* 13. State Approximatley 17.7 miles southeast of Myton, Utah Uintah UT 15. Distance from proposed\* 16. No. of Acres in lease 17. Spacing Unit dedicated to this well location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) Approx. 50' f/lse, 10,510' f/unit 20 Acres 1,120.00 19. Proposed Depth 20. BLM/BIA Bond No. on file 18. Distance from proposed location\* to nearest well, drilling, completed, applied for, on this lease, ft. Approx. 1169' 5965' WYB000493 21. Elevations (Show whether DF, KDB, RT, GL, etc.) 22. Approximate date work will start\* 23. Estimated duration 5011' GL 3rd Quarter 2008 Approximately seven (7) days from spud to rig release. 24. Attachments The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall be attached to this form: 1. Well plat certified by a registered surveyor. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). 2. A Drilling Plan. Operator certification. A Surface Use Plan (if the location is on National Forest System Lands, the Such other site specific information and/or plans as may be required by the SUPO shall be filed with the appropriate Forest Service Office). authorized officer. Name (Printed/Typed) 25. Signature Date Mandie Crozier 4/22/08 Title Regulatory Specialist Name (Printed/Typed)
BRADLEY G. HIL

Application approval does not warrant or certify the the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

OFFENVIRONMENTAL MANAGER

Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

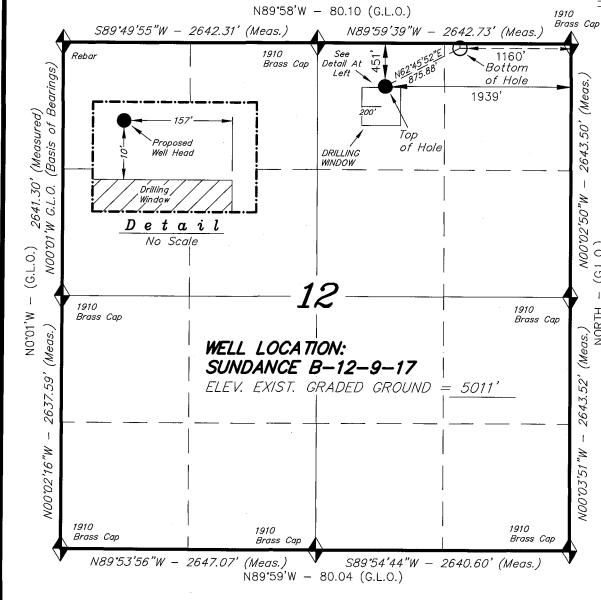
\*(Instructions on reverse)

APR 2 9 2008

Surf 589413X 44337854 40.051457 -109.951742

589450X 4433910Y 40.052558 -109.948948 Federal Approval of this DIV. OF OIL, GAS & MINING Action is Necessary

## T9S, R17E, S.L.B.&M.

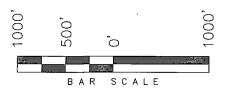


= SECTION CORNERS LOCATED

BASIS OF ELEV; U.S.G.S. 7-1/2 min QUAD (PARIETTE DRAW SW) SUNDANCE B-12-9-17 (Surface Location) NAD 83 LATITUDE = 40° 03' 05.19" LONGITUDE = 109° 57' 08.84"

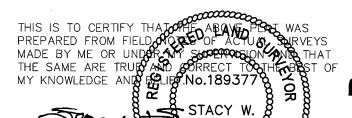
#### NEWFIELD PRODUCTION COMPANY

WELL LOCATION, SUNDANCE B-12-9-17, LOCATED AS SHOWN IN THE NW 1/4 NE 1/4 OF SECTION 12, T9S, R17E, S.L.B.&M. UINTAH COUNTY, UTAH.



#### Note:

1. The bottom of hole footages are 50' FNL & 1160' FEL.



STATE OF STATE OF

#### TRI STATE LAND SURVEYING & CONSULTING

180 NORTH VERNAL AVE. - VERNAL, UTAH 84078 (435) 781-2501

DATE SURVEYED: 01-16-08	SURVEYED BY: T.H.
DATE DRAWN: 02-27-08	DRAWN BY: F.T.M.
REVISED:	SCALE: 1" = 1000'

#### NEWFIELD PRODUCTION COMPANY SUNDANCE FEDERAL B-12-9-17 AT SURFACE: NW/NE SECTION 12, T9S, R17E UINTAH COUNTY, UTAH

#### ONSHORE ORDER NO. 1

#### **DRILLING PROGRAM**

#### 1. GEOLOGIC SURFACE FORMATION:

Uinta formation of Upper Eocene Age

#### 2. ESTIMATED TOPS OF IMPORTANT GEOLOGIC MARKERS:

Uinta

0' - 1293'

Green River

1293'

Wasatch

5965'

#### 3. <u>ESTIMATED DEPTHS OF ANTICIPATED WATER, OIL, GAS OR MINERALS:</u>

Green River Formation 1293' - 5965' - Oil

#### 4. PROPOSED CASING PROGRAM

Please refer to the Monument Butte Field Standard Operation Procedure (SOP).

#### 5. <u>MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL:</u>

Please refer to the Monument Butte Field SOP. See Exhibit "C".

#### 6. TYPE AND CHARACTERISTICS OF THE PROPOSED CIRCULATION MUDS:

Please refer to the Monument Butte Field SOP.

#### 7. <u>AUXILIARY SAFETY EQUIPMENT TO BE USED:</u>

Please refer to the Monument Butte Field SOP.

#### 8. <u>TESTING, LOGGING AND CORING PROGRAMS:</u>

Please refer to the Monument Butte Field SOP.

#### 9. <u>ANTICIPATED ABNORMAL PRESSURE OR TEMPERATURE:</u>

The anticipated maximum bottom hole pressure is 1800 psi. It is not anticipated that abnormal temperatures will be encountered.

#### 10. ANTICIPATED STARTING DATE AND DURATION OF THE OPERATIONS:

Please refer to the Monument Butte Field SOP.

#### NEWFIELD PRODUCTION COMPANY SUNDANCE FEDERAL B-12-9-17 AT SURFACE: NW/NE SECTION 12, T9S, R17E UINTAH COUNTY, UTAH

#### ONSHORE ORDER NO. 1

#### **MULTI-POINT SURFACE USE & OPERATIONS PLAN**

#### 1. EXISTING ROADS

See attached Topographic Map "A"

To reach Newfield Production Company well location site Sundance Federal B-12-9-17 located in the NW 1/4 NE 1/4 Section 12, T9S, R17E, Uintah County, Utah:

Proceed southwesterly out of Myton, Utah along Highway 40 - 1.4 miles  $\pm$  to the junction of this highway and UT State Hwy 53; proceed southeasterly -15.2 miles  $\pm$  to it's junction with an existing road to the northeast; proceed northeasterly -0.9 miles  $\pm$  to it's junction with an existing road to the west; proceed westerly -0.2 miles  $\pm$  to the existing Federal 2-12-9-17 well location.

#### 2. PLANNED ACCESS ROAD

There is no proposed access road for this location. The proposed well will be drilled directionally off of the existing Federal 2-12-9-17well pad. See attached **Topographic Map "B"**.

#### 3. LOCATION OF EXISTING WELLS

Refer to Exhibit "B".

#### 4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES

The proposed well will be drilled directionally off of the Federal 2-12-9-17 well pad. There will be a pumping unit and a short flow line added to the tank battery for the proposed Sundance Federal B-12-9-17. All permanent surface equipment will be painted Carlsbad Canyon.

Please refer to the Monument Butte Field Standard Operating Procedure (SOP).

#### 5. LOCATION AND TYPE OF WATER SUPPLY

Newfield Production will transport water by truck for drilling purposes from the following water sources:

Johnson Water District Water Right: 43-10136

Neil Moon Pond

Water Right: 43-11787

Maurice Harvey Pond Water Right: 47-1358

Newfield Collector Well

Water Right: 41-3530 (A30414DV, contracted with the Duchesne County Conservancy District).



#### 6. SOURCE OF CONSTRUCTION MATERIALS

The proposed Sundance Federal B-12-9-17 will be drilled off of the existing Federal 2-12-9-17 well pad. No additional surface disturbance will be required for this location.

#### 7. METHODS FOR HANDLING WASTE DISPOSAL

Please refer to the Monument Butte Field SOP.

#### 8. <u>ANCILLARY FACILITIES</u>

Please refer to the Monument Butte Field SOP.

#### 9. WELL SITE LAYOUT

See attached Location Layout Diagram.

#### 10. PLANS FOR RESTORATION OF SURFACE

Please refer to the Monument Butte Field SOP.

 SURFACE OWNERSHIP - Bureau Of Land Management (Proposed location and access roads leading to).

#### 12. OTHER ADDITIONAL INFORMATION

Newfield Production Company requests 1,100' of disturbed area be granted in Lease UTU-39713 to allow for construction of the proposed water line. It is proposed that the disturbed area will temporarily be 50' wide to allow for construction of a buried 3" steel water injection line and a buried 3" poly water return line and 30' wide upon completion of the proposed water lines. Refer to Topographic Map "C." For a ROW plan of development, please refer to the Monument Butte Field SOP. In the event that the proposed well is converted to a water injection well, a separate injection permit will be applied for through the proper agencies.

The Archaeological Resource Survey and Paleontological Resource Survey for the 1,100' of proposed water injection pipeline is attached. MOAC Report #03-58, 5/19/03. Paleontological Resource Survey prepared by, Wade E. Miller, 5/19/03. See attached report cover pages, Exhibit "D".

#### Water Disposal

Immediately upon first production, all produced water will be confined to a steel storage tank. If the production water meets quality guidelines, it is transported to the Ashley, Monument Butte, Jonah, and Beluga water injection facilities by company or contract trucks. Subsequently, the produced water is injected into approved Class II wells to enhance Newfield's secondary recovery project.

Water not meeting quality criteria, is disposed at Newfield's Pariette #4 disposal well (Sec. 7, T9S R19E) or at State of Utah approved surface disposal facilities.

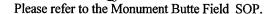
#### Threatened, Endangered, And Other Sensitive Species

None for the proposed Sundance Federal B-12-9-17

#### Reserve Pit Liner

A 16 mil liner with felt is required. Please refer to the Monument Butte Field SOP.

#### **Location and Reserve Pit Reclamation**



The following seed mixture will be used on the topsoil stockpile, to the recontoured surface of the reserve pit, and for final reclamation: (All poundages are in pure live seed)

Squirrell Tail	Elymus Elymoides	6 lbs/acre
Siberian Wheatgrass	Agropyron Fragile	2 lbs/acre
Gardner Saltbush	Atriplex Gardneri	1 lbs/acre
Shadscale	Atriplex Confertifolia	1 lbs/acre
Fourwing Saltbush	Atriplex Canescens	1 lbs/acre
Scarlet Globemallow	Sphaeralcea Conccinea	0.20 lbs/acre
Forage Kochia	Kochia Prostrata	0.20 lbs/acre

#### **Details of the On-Site Inspection**

The proposed Sundance Federal B-12-9-17 was on-sited on 3/26/08. The following were present; Dave Allred (Newfield Production), Kevan Stevens (Newfield Production), Michael Cutler (Bureau of Land Management), Brandon McDonald (Bureau of Land Management) and James Herford (Bureau of Land Management). Weather conditions were clear and ground cover was 100% open.

#### LESSEE'S OR OPERATORS REPRESENTATIVE AND CERTIFICATION

#### <u>Representative</u>

Name:

Dave Allred

Address:

Route #3 Box 3630

Myton, UT 84052

Telephone:

(435) 646-3721

#### **Certification**

Please be advised that NEWFIELD PRODUCTION COMPANY is considered to be the operator of well #B-12-9-17 NW/NE Section 12, Township 9S, Range 17E: Lease UTU-39713 Uintah County, Utah: and is responsible under the terms and conditions of the lease for the operations conducted upon the leased lands. Bond coverage is provided by, Federal Bond #WYB000493.

I hereby certify that the proposed drill site and access route have been inspected, and I am familiar with the conditions which currently exist; that the statements made in this plan are true and correct to the best of my knowledge; and that the work associated with the operations proposed here will be performed by Newfield Production Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

4/22/08 Date

Mandie Crozier Regulatory Specialist

Newfield Production Company

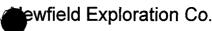


Project: Uintah County, UT NAD83 UTC

Site: Sundance

Well: Sundance B-12-9-17

Wellbore: OH Design: Plan #1





Azimuths to True North Magnetic North: 11.66

> Magnetic Field Strength: 52628.9sn7 Dip Angle: 65.91 Date: 2008-04-23 Model: IGRF2005-1

#### WELL DETAILS: Sundance B-12-9-17

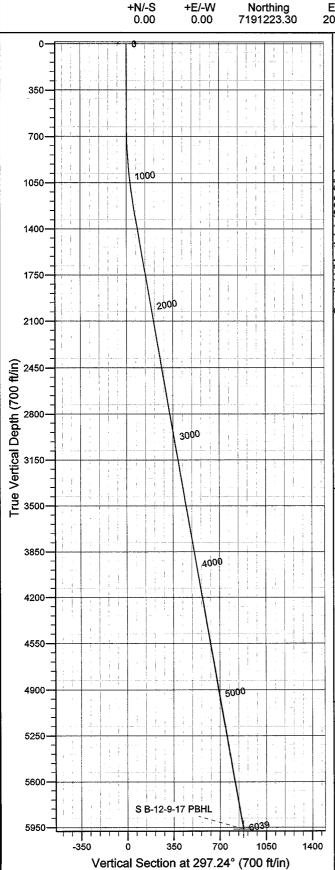
Northing 7191223.30

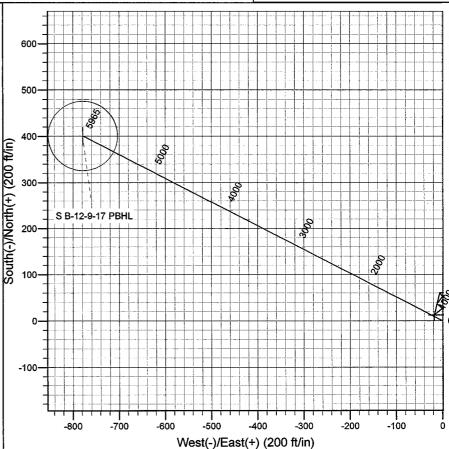
GL 5011' & RKB 12' @ 5023.00ft Easting 2073597.64

5011.00 Latitude

40° 3' 5.190 N

Longitude 109° 57<sup>°</sup> 8.840 W





Plan: Plan #1 (Sundance B-12-9-17/OH)

Created By: Julie Cruse Date: 2008-04-23

PROJECT DETAILS: Uintah County, UT NAD83 UTC

Geodetic System: US State Plane 1983 Datum: North American Datum 1983

Ellipsoid: GRS 1980 Zone: Utah Central Zone

Location:

System Datum: Mean Sea Level

Local North: True

#### SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	
1257.86	9.87	297.24	1254.61	25.87	-50.24	1.50	297.24	56.51	
6038.98	9.87	297.24	5965.00	400.91	-778.74	0.00	0.00	875.88	S B-12-9-17 PBHL

## **Newfield Exploration Co.**

Uintah County, UT NAD83 UTC Sundance Sundance B-12-9-17 OH

Plan: Plan #1

## **Standard Planning Report**

23 April, 2008

#### **Scientific Drilling**

#### Planning Report

Database:

EDM 2003.16 Multi-User Db

Company: Project:

Newfield Exploration Co. Uintah County, UT NAD83 UTC

Site: Well: Sundance

Sundance B-12-9-17

Wellbore: Design:

ОН Plan #1 Local Co-ordinate Reference:

TVD Reference:

**MD** Reference: North Reference:

**Survey Calculation Method:** 

Well Sundance B-12-9-17

GL 5011' & RKB 12' @ 5023.00ft GL 5011' & RKB 12' @ 5023.00ft

True

Minimum Curvature

**Project** 

Uintah County, UT NAD83 UTC

Map System:

US State Plane 1983

North American Datum 1983 Geo Datum:

Map Zone:

Utah Central Zone

System Datum:

Mean Sea Level

Site

Sundance,

Site Position:

Lat/Long

Northing: Easting:

7,199,041.33 ft 2,077,411.03ft

Latitude:

Longitude:

40° 4' 21.790 N

109° 56' 18.050 W

Position Uncertainty:

0.00 ft

Slot Radius:

**Grid Convergence:** 

1.00°

Well

From:

Sundance B-12-9-17, 451' FNL 1939' FEL Sec 12 T9S R17E

Well Position

+N/-S +E/-W 0.00 ft 0.00 ft Northing: Easting:

7,191,223.30 ft 2,073,597.64 ft Latitude: Longitude:

40° 3' 5.190 N 109° 57' 8.840 W

**Position Uncertainty** 

0.00 ft

Wellhead Elevation:

**Ground Level:** 

5,011.00 ft

Wellbore

ОН

Magnetics

**Model Name** 

Sample Date

Declination (°)

**Dip Angle** (°)

0.00

Field Strength

(nT)

IGRF2005-10

2008-04-23

11.66

65.91

52,629

0.00 S B-12-9-17 PBHL

Design

Plan #1

9.87

297.24

Audit Notes:

Version:

Phase:

PLAN

Tie On Depth:

0.00

+E/-W

Direction

Vertical Section:

6,038.98

Depth From (TVD) (ft) 0.00

5,965.00

400.91

+N/-S (ft) 0.00

(ft) 0.00

0.00

(°) 297.24

0.00

**Plan Sections** Measured Vertical Dogleg Build Turn Azimuth Depth +N/-S Depth Inclination +E/-W Rate Rate Rate TFO (°/100ft) (°/100ft) (°/100ft) (ft) (ft) (ft) (ft) Target (°) (°) (°) 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 600.00 0.00 0.00 0.00 0.00 0.00 600.00 0.00 1,257.86 9.87 297.24 25.87 -50.24 1.50 1.50 0.00 297.24 1,254.61

-778.74

#### **Scientific Drilling**

#### Planning Report

Database:

EDM 2003.16 Multi-User Db

Company: Project: Newfield Exploration Co. Uintah County, UT NAD83 UTC

Site: Well: Sundance

Plan #1

Sundance B-12-9-17 OH

Wellbore: Design: Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method: Well Sundance B-12-9-17

GL 5011' & RKB 12' @ 5023.00ft GL 5011' & RKB 12' @ 5023.00ft

True

Minimum Curvature

Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Vertical Section	Dogleg Rate	Build Rate	Turn Rate
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	(°/100ft)	(°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00					0.00				
400.00	0.00 0.00	0.00 0.00	300.00 400.00	0.00 0.00	0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	1.50	297.24	699.99	0.60	-1.16	1.31	1.50	1.50	0.00
800.00	3.00	297.24	799.91	2.40	-4.65	5.23	1.50	1.50	0.00
900.00	4.50	297.24	899.69	5.39	-10.47	11.77	1.50	1.50	0.00
1,000.00	6.00	297.24	999.27	9.58	-18.60	20.92	1.50	1.50	0.00
1,100.00	7.50	297.24	1,098.57	14.96	-29.05	32.68	1.50	1.50	0.00
1,200.00	9.00	297.24	1,197.54	21.53	-41.81	47.03	1.50	1.50	0.00
1,257.86	9.87	297.24	1,254.61	25.87	-50.24	56.51	1.50	1.50	0.00
1,300.00	9.87	297.24	1,296.13	29.17	-56.66	63.73	0.00	0.00	0.00
	0.07	207.04	1 204 65		74.00	90.97	0.00	0.00	0.00
1,400.00	9.87	297.24	1,394.65	37.02	-71.90	80.87	0.00	0.00	0.00
1,500.00	9.87	297.24	1,493.17	44.86	-87.14	98.01	0.00	0.00	
1,600.00	9.87	297.24	1,591.69	52.70	-102.38	115.15	0.00	0.00	0.00
1,700.00	9.87	297.24	1,690.21	60.55	-117.61	132.28	0.00	0.00	0.00
1,800.00	9.87	297.24	1,788.73	68.39	-132.85	149.42	0.00	0.00	0.00
1,900.00	9.87	297.24	1,887.25	76.24	-148.09	166.56	0.00	0.00	0.00
2,000.00	9.87	297.24	1,985.77	84.08	-163.32	183.70	0.00	0.00	0.00
2,100.00	9.87	297.24	2,084.29	91.93	-178.56	200.83	0,00	0.00	0.00
2,200.00	9.87	297.24	2,182.81	99.77	-193.80	217.97	0.00	0.00	0.00
2,300.00	9.87	297.24	2,702.07	107.61	-209.03	235.11	0.00	0.00	0.00
2,300.00	9.07	237.24	•	107.01	-203.03				
2,400.00	9.87	297.24	2,379.86	115.46	-224.27	252.25	0.00	0.00	0.00
2,500.00	9.87	297.24	2,478.38	123.30	-239.51	269,38	0.00	0.00	0.00
2,600.00	9.87	297.24	2,576.90	131.15	-254.75	286.52	0.00	0.00	0.00
2,700.00	9.87	297.24	2,675.42	138.99	-269.98	303.66	0.00	0.00	0.00
2,800.00	9.87	297.24	2,773.94	146.83	-285.22	320.80	0.00	0.00	0.00
0.000.00	9.87	207.24	2,872.46	154.68	-300.46	337.93	0.00	0.00	0.00
2,900.00		297.24 297.24	2,970.98		-300,46	355.07	0.00	0.00	0.00
3,000.00	9.87			162.52					0.00
3,100.00	9.87	297.24	3,069.50	170.37	-330.93	372.21	0.00	0.00	
3,200.00	9.87	297.24	3,168.02	178.21	-346.17	389.35	0.00	0.00	0.00
3,300.00	9.87	297.24	3,266.54	186.06	-361.40	406.48	0.00	0.00	0.00
3,400.00	9.87	297.24	3,365.06	193.90	-376.64	423.62	0.00	0.00	0.00
3,500.00	9.87	297.24	3,463.58	201.74	-391.88	440.76	0.00	0.00	0.00
3,600.00	9.87	297.24	3,562.10	209.59	-407.12	457.90	0.00	0.00	0.00
3,700.00	9.87	297.24	3,660.62	217.43	-422.35	475.03	0.00	0.00	0.00
3,800.00	9.87	297.24	3,759.14	225.28	-437.59	492.17	0.00	0.00	0.00
,									
3,900.00	9.87	297.24	3,857.66	233.12	-452.83	509.31	0.00	0.00	0.00
4,000.00	9.87	297.24	3,956.18	240.96	<del>-4</del> 68.06	526.45	0.00	0.00	0.00
4,100.00	9.87	297.24	4,054.71	248.81	-483.30	543.59	0.00	0.00	0.00
4,200.00	9.87	297.24	4,153.23	256.65	-498.54	560.72	0.00	0.00	0.00
4,300.00	9.87	297.24	4,251.75	264.50	-513.77	577.86	0.00	0.00	0.00
4 400 00	9.87	297.24	4,350.27	272.34	-529.01	595.00	0.00	0.00	0.00
4,400.00					-529.01 -544.25	612.14	0.00	0.00	0.00
4,500.00	9.87	297.24	4,448.79	280.19					
4,600.00	9.87	297.24	4,547.31	288.03	-559.49	629.27	0.00	0.00	0.00
4,700.00	9.87	297.24	4,645.83	295.87	-574.72	646.41	0.00	0.00	0.00
4,800.00	9.87	297.24	4,744.35	303.72	-589.96	663.55	0.00	0.00	0.00
4,900.00	9.87	297.24	4,842.87	311.56	-605.20	680.69	0.00	0.00	0.00
5,000.00	9.87	297.24	4,941,39	319.41	-620.43	697.82	0.00	0.00	0.00
5,100.00	9.87	297.24	5,039.91	327.25	-635.67	714.96	0.00	0.00	0.00
5,200.00	9.87	297.24	5,138.43	335.10	-650.91	732.10	0.00	0.00	0.00

#### **Scientific Drilling**

#### Planning Report

Database:

EDM 2003.16 Multi-User Db

Company:

Newfield Exploration Co. Uintah County, UT NAD83 UTC

Project: Site:

Sundance

Well:

Sundance B-12-9-17

Wellbore: Design: OH Plan #1 Local Co-ordinate Reference:

TVD Reference: MD Reference: GL 5011' & RKB 12' @ 5023.00ft GL 5011' & RKB 12' @ 5023.00ft

North Reference:

**Survey Calculation Method:** 

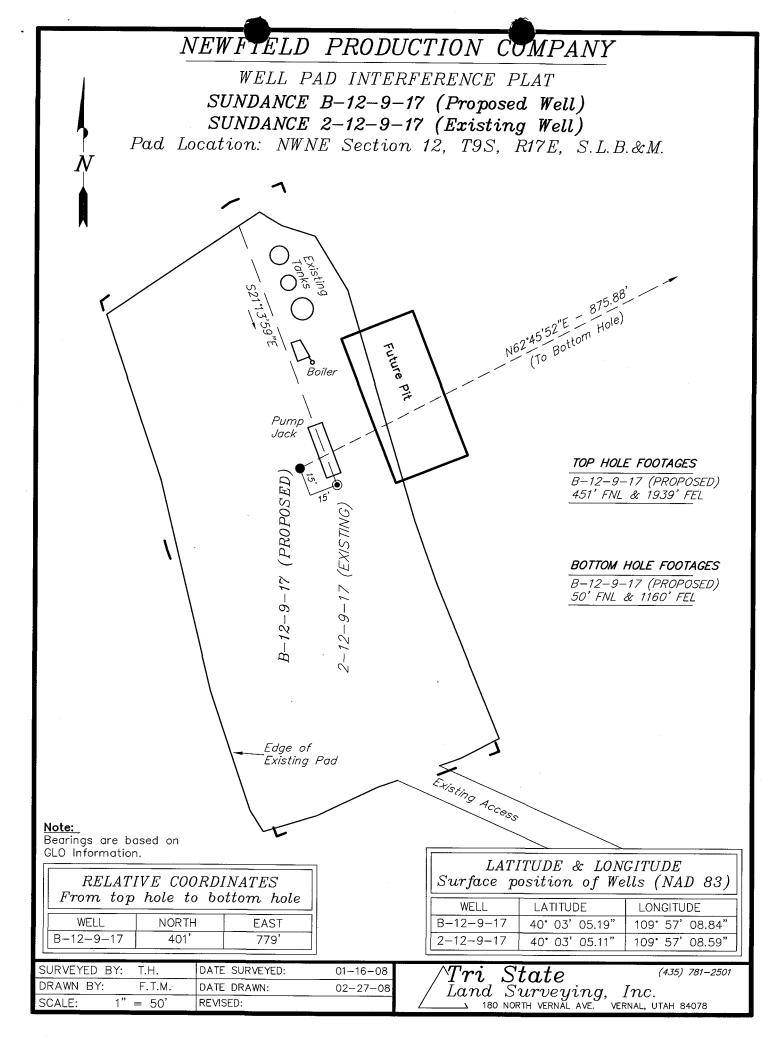
True

Minimum Curvature

Well Sundance B-12-9-17

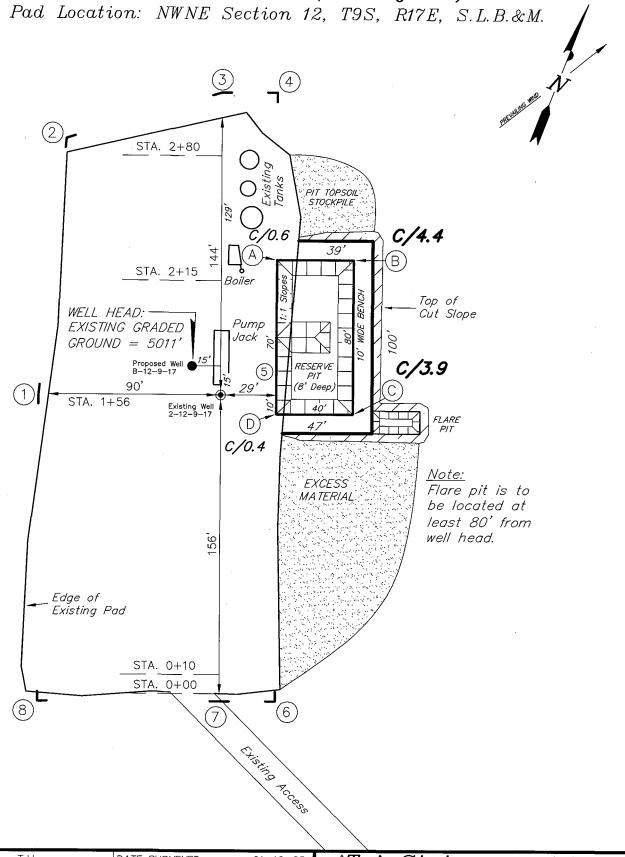
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,300.00	9.87	297,24	5,236.95	342.94	-666.14	749.24	0.00	0.00	0.00
5,400.00	9.87	297.24	5,335.47	350.78	-681.38	766.37	0.00	0.00	0.00
5,500.00	9.87	297.24	5,433.99	358.63	-696.62	783.51	0.00	0.00	0.00
5,600.00	9.87	297.24	5,532.51	366.47	-711.85	800.65	0.00	0.00	0.00
5,700.00	9.87	297.24	5,631.03	374.32	-727.09	817.79	0.00	0.00	0.00
5,800.00	9.87	297.24	5,729.55	382.16	-742.33	834.92	0.00	0.00	0.00
5,900.00	9.87	297.24	5,828.08	390.00	-757.57	852.06	0.00	0.00	0.00
6,000.00	9.87	297.24	5,926.60	397.85	-772.80	869.20	0.00	0.00	0.00
6,038,98	9.87	297.24	5,965.00	400.91	-778.74	875.88	0.00	0.00	0.00

Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
S B-12-9-17 PBHL - plan hits target cent - Circle (radius 75.00		0.00	5,965.00	400.91	<i>-</i> 778.74	7,191,610.67	2,072,812.08	40° 3′ 9.152 N	109° 57' 18.855 W



## NEWFTELD PRODUCTION COMPANY

SUNDANCE B-12-9-17 (Proposed Well) SUNDANCE 2-12-9-17 (Existing Well)



 SURVEYED BY:
 T.H.
 DATE SURVEYED:
 01-16-08

 DRAWN BY:
 F.T.M.
 DATE DRAWN:
 02-27-08

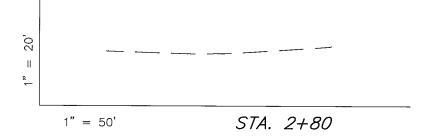
 SCALE:
 1" = 50'
 REVISED:

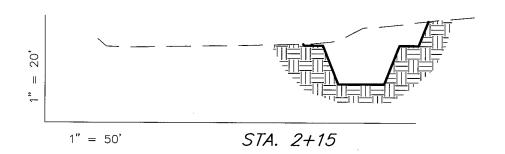
/Tri~State (435) 781–250, Land~Surveying,~Inc.

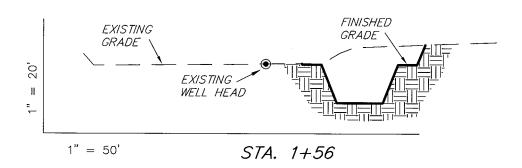
## NEW FIELD PRODUCTION COMPANY

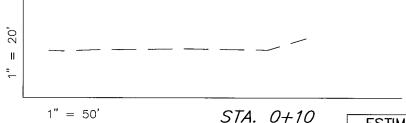
### CROSS SECTIONS

SUNDANCE B-12-9-17 (Proposed Well) SUNDANCE 2-12-9-17 (Existing Well)









NOTE: UNLESS OTHERWISE NOTED CUT SLOPES ARE AT 1:1 FILL SLOPES ARE AT 1.5:1

#### ESTIMATED EARTHWORK QUANTITIES (No Shrink or swell adjustments have been used) (Expressed in Cubic Yards)

ITEM	CUT	FILL	6" TOPSOIL	EXCESS
PAD	740	0	Topsoil is not included	740
PIT	640	0	in Pad Cut	640
TOTALS	1,380	0	140	1,380

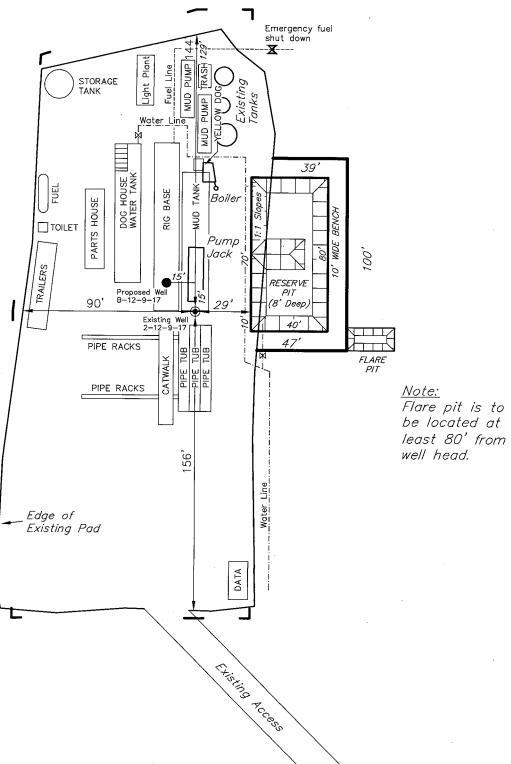
w.e.		
SURVEYED BY: T.H.	DATE SURVEYED:	01-16-08
DRAWN BY: F.T.M.	DATE DRAWN:	02-27-08
SCALE: $1" = 50'$	REVISED:	

 $Tri~State \ Land~Surveying,~Inc.$   $\_$  180 north vernal ave. Vernal, utah 84078 (435) 781-2501

## NEW FIELD PRODUCTION COMPANY

## TYPICAL RIG LAYOUT

SUNDANCE B-12-9-17 (Proposed Well) SUNDANCE 2-12-9-17 (Existing Well)



SURVEYED BY: T.H.	DATE SURVEYED:	01-16-08
DRAWN BY: F.T.M.	DATE DRAWN:	02-27-08
SCALE: $1" = 50'$	REVISED:	

 $egin{array}{ccccc} Tri & State & ag{4.35} & 781-2501 \ Land & Surveying, & Inc. \ 
ightharpoonup & 180 NORTH VERNAL AVE. VERNAL, UTAH 84078 \ \end{array}$ 

# Proposed Site Facility Diagram

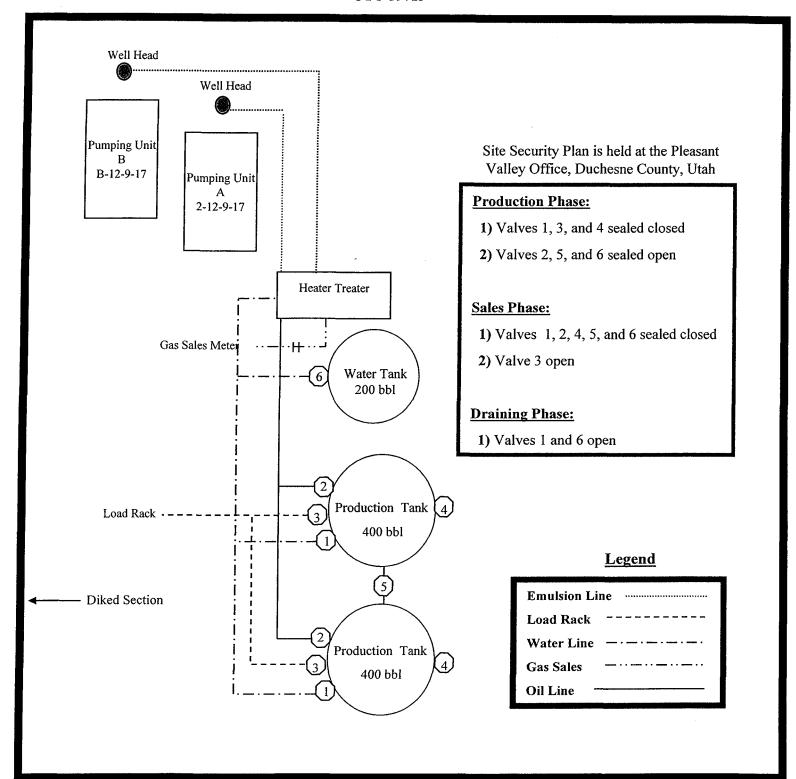
Sundance Federal B-12-9-17

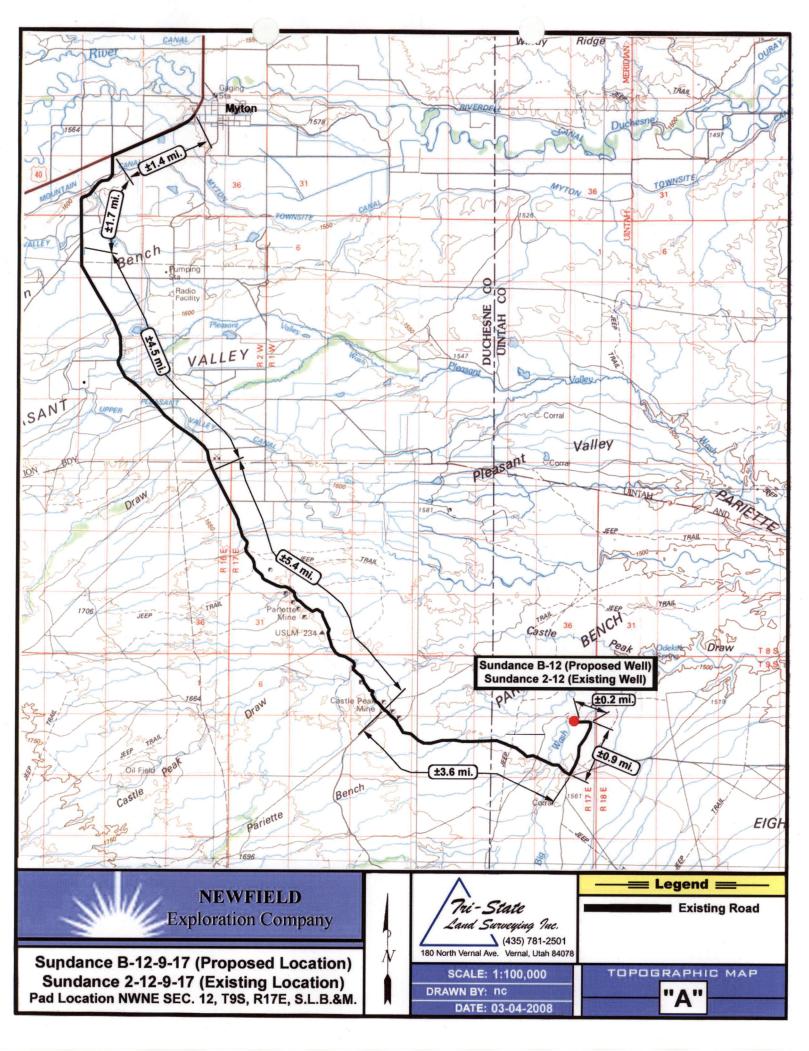
From the 2-12-9-17 Location

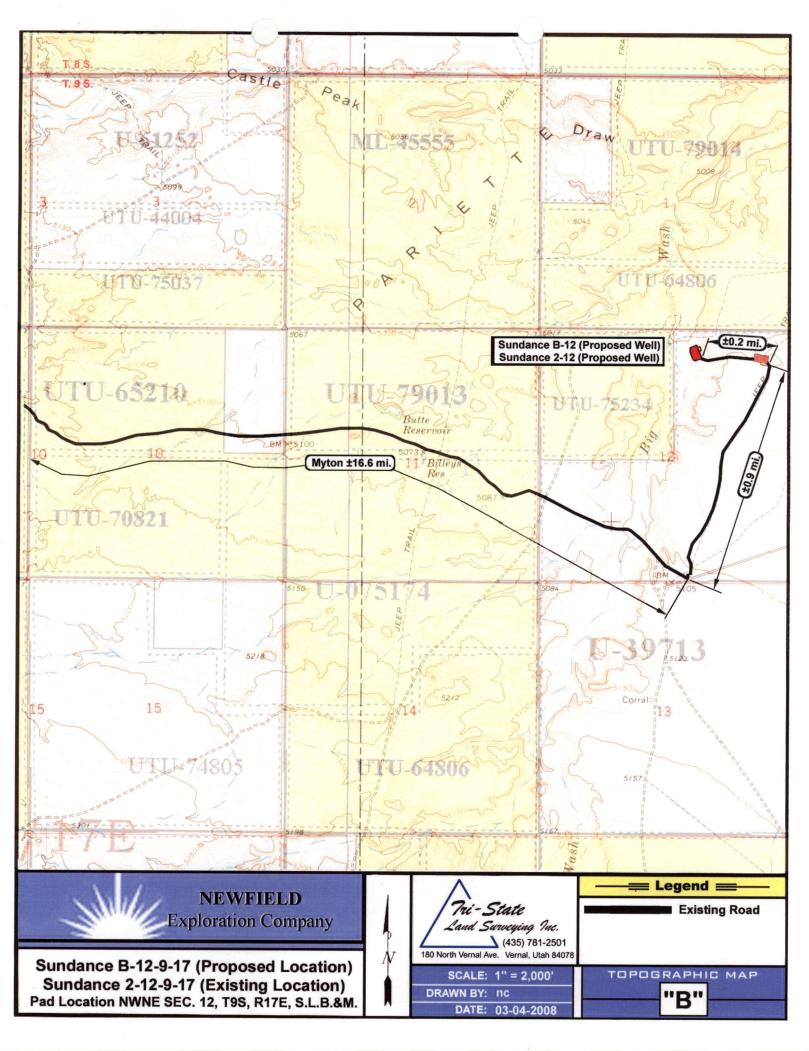
NW/NE Sec. 12 T9S, R17E

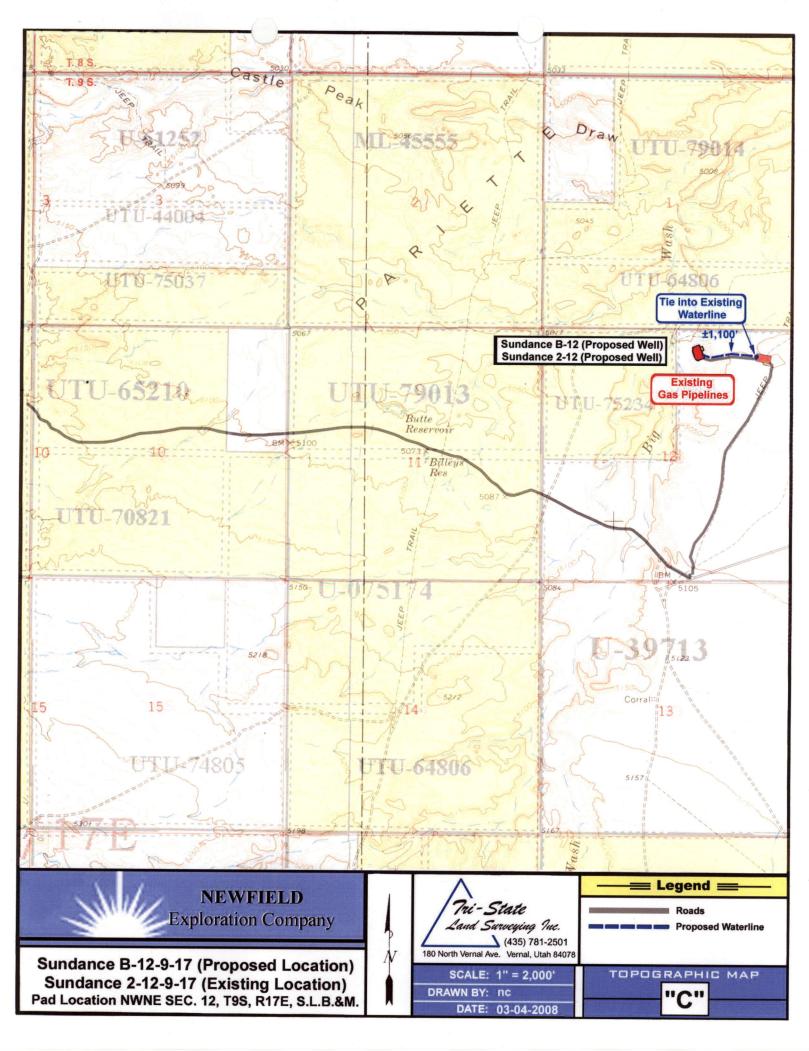
Uintah County, Utah

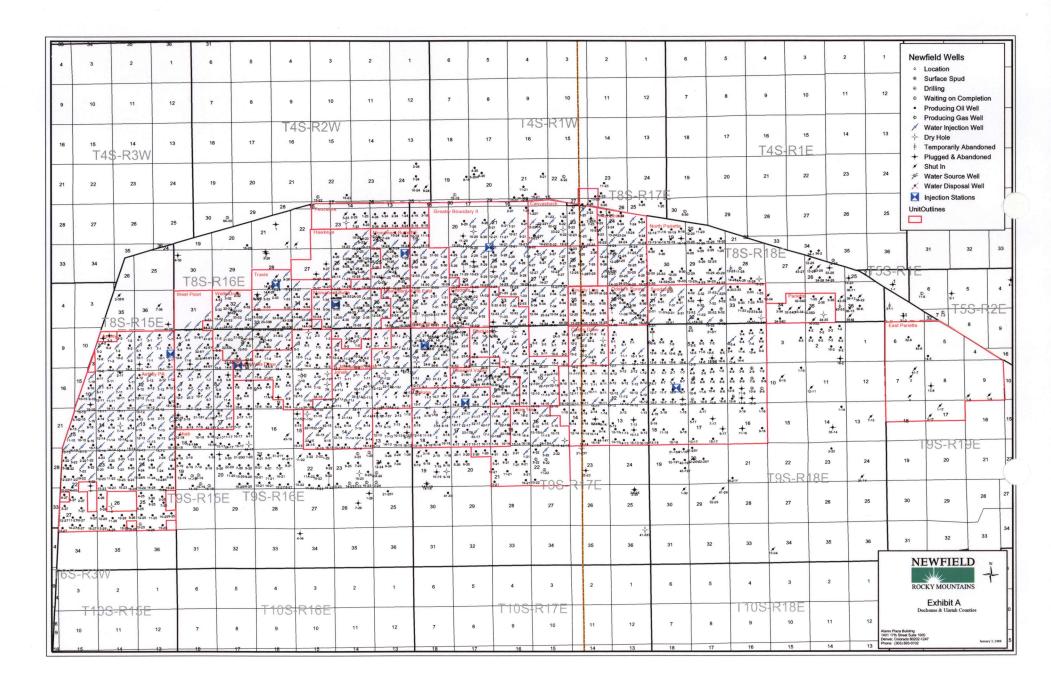
UTU-39713

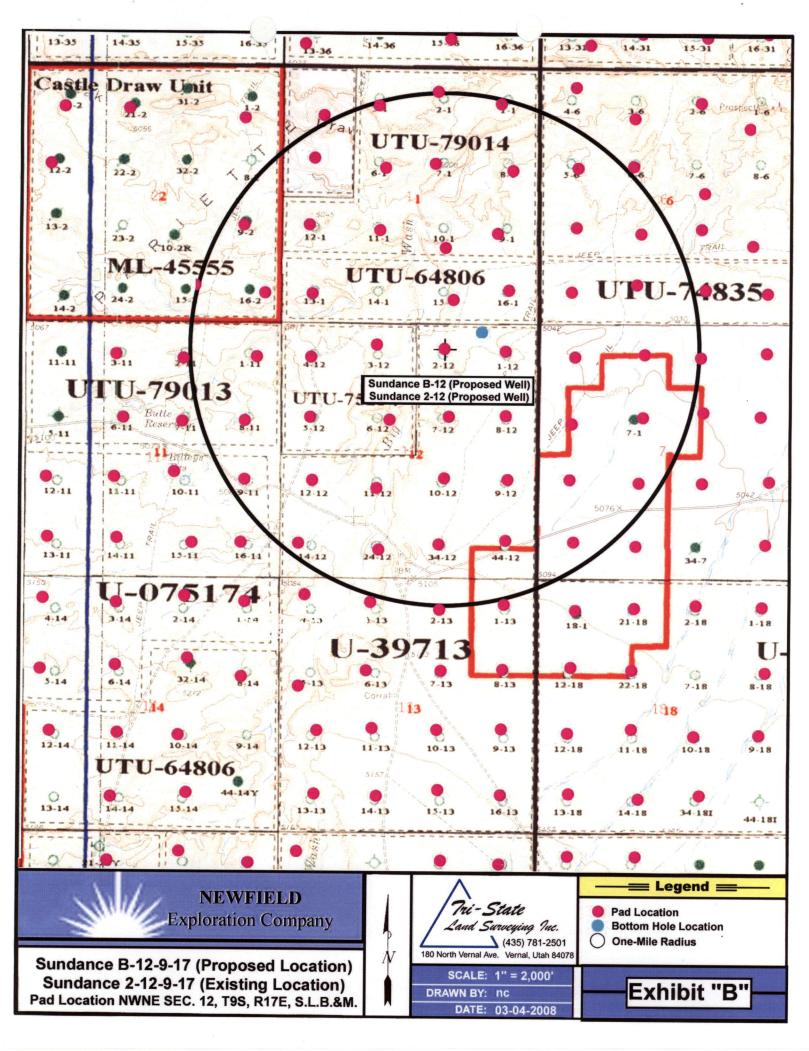




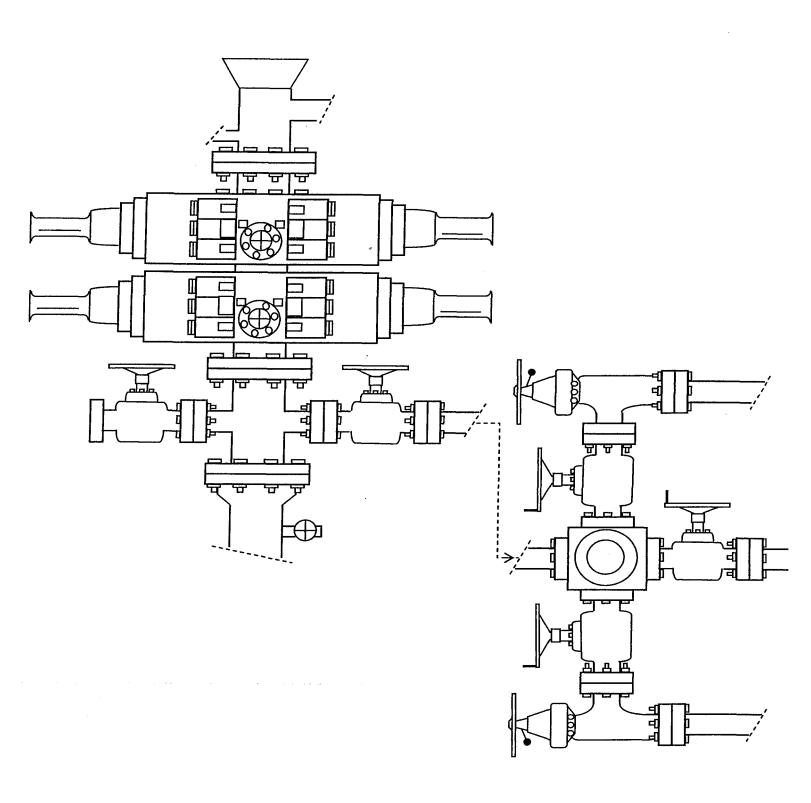








## **2-M SYSTEM**Blowout Prevention Equipment Systems



**EXHIBIT C** 

Exhibit "D"

#### **CULTURAL RESOURCE INVENTORY OF** INLAND RESOURCES' BLOCK PARCELS IN T 9S, R 17E, SECTIONS 1 AND 12 Uintah County, Utah

BY:

Mark C. Bond

Prepared For:

**Bureau of Land Management** Vernal Field Office

Prepared Under Contract With:

Jon D. Holst & Company for Inland Resources 2507 Flintridge Place Fort Collins, CO 80521

Prepared By:

Montgomery Archaeological Consultants P.O. Box 147 Moab, Utah 84532

MOAC Report No. 03-58

May 19, 2003

United States Department of Interior (FLPMA) Permit No. 03-UT-60122

State of Utah Antiquities Project (Survey) Permit No. U-03-MQ-0328b

243

## INLAND RESOURCES, INC.

# PALEONTOLOGICAL FIELD SURVEY OF PROPOSED PRODUCTION DEVELOPMENT AREAS, DUCHESNE AND UINTAH COUNTIES, UTAH

(South ½ Section 6, T 9 S, R 18 E; South ½ Section 1, T 9 S, 17 R E; all of Sections 11 and 12, the NW, SE & NE quarters of the SW 1/4 Section 10, the NE1/4 & SE 1/4 of the SE 1/4 Section 9, T 9 S, R 17 E and the SE 1/4, SW 1/4, NE 1/4 and SE 1/4 of the SE 1/4, Section 33, T 8 S, R 17 E.)

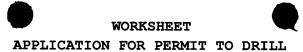
#### REPORT OF SURVEY

Prepared for:

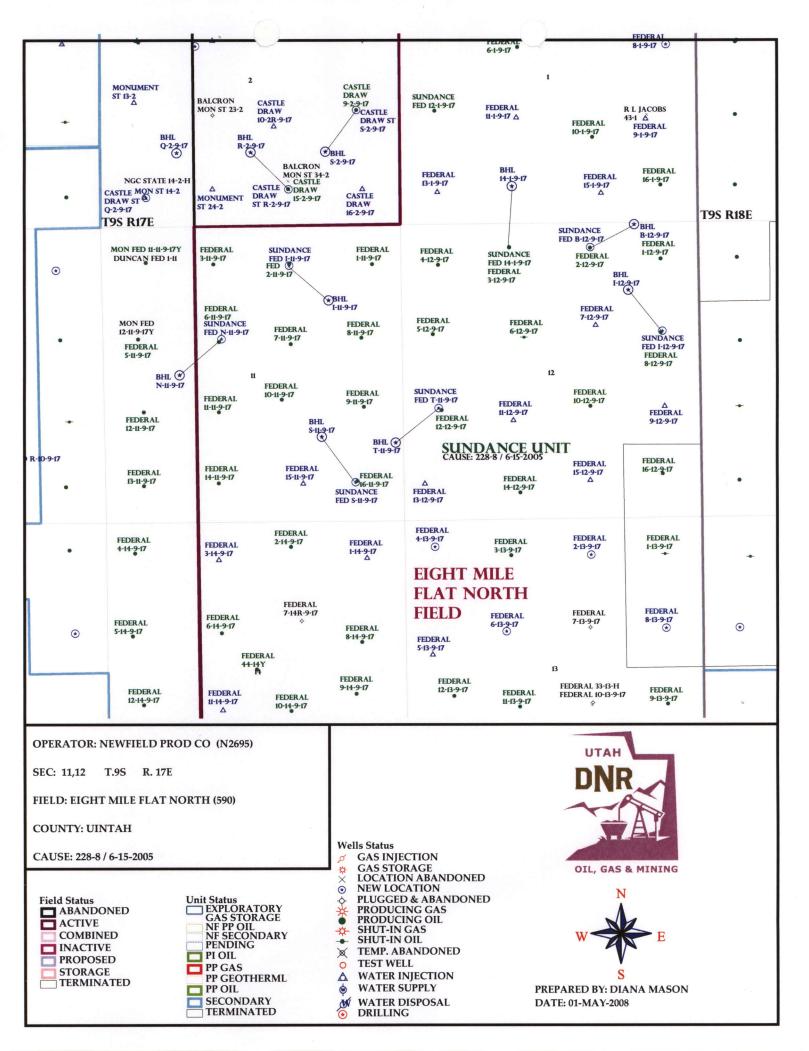
Inland Resources, Inc.

Prepared by:

Wade E. Miller Consulting Paleontologist May 8, 2003



APD RECEIVED: 04/29/2008	APT NO. AS	SIGNED: 43-04	7-40031			
WELL NAME: SUNDANCE FED B-12-9-17  OPERATOR: NEWFIELD PRODUCTION ( N2695 )	DUONE MIMOER	k: 435-646-372	71			
OPERATOR: NEWFIELD PRODUCTION ( N2695 )  CONTACT: MANDIE CROZIER	PHONE NOMBER	(: 433 040 372				
CONTACT: ITEMPTE CACCETER.	<u> </u>					
PROPOSED LOCATION:	INSPECT LOC.	ATN BY: /	/			
NWNE 12 090S 170E SURFACE: 0451 FNL 1939 FEL	Tech Review	Initials	Date			
BOTTOM: 0050 FNL 1160 FEL	Engineering					
COUNTY: UINTAH	Geology					
LATITUDE: 40.05146 LONGITUDE: -109.9518 UTM SURF EASTINGS: 589413 NORTHINGS: 44337	Surface					
FIELD NAME: 8 MILE FLAT NORTH ( 590	65					
LEASE TYPE: 1 - Federal  LEASE NUMBER: UTU-39713  SURFACE OWNER: 1 - Federal	PROPOSED FOR		RV			
RECEIVED AND/OR REVIEWED:	LOCATION AND SITIN	G:				
Plat	R649-2-3.					
Bond: Fed[1] Ind[] Sta[] Fee[]	Unit: SUNDANCE (GRRV)					
(No. <u>WYB000493</u> )  ►↓ Potash (Y/N)	R649-3-2. Ge	neral				
Oil Shale 190-5 (B) or 190-3 or 190-13	Siting: 460 From Qtr/Qtr & 920' Between Wells					
Water Permit	R649-3-3. Exception					
(No. $43-10136$ )  RDCC Review (Y/N)	Drilling Unit					
(Date:)	Board Cause Eff Date:	No: 228				
<b>LUM</b> Fee Surf Agreement (Y/N)	_	Pends Conval	2005 S. TIND			
<u>LLM</u> Intent to Commingle (Y/N)	_ <b>√</b> _ R649-3-11. D	)	.11			
COMMENTS: Sop, Separat Lie						
STIPULATIONS: 1-Jean Opproved						



## **United States Department of the Interior**

#### BUREAU OF LAND MANAGEMENT

Utah State Office P.O. Box 45155 Salt Lake City, Utah 84145-0155

IN REPLY REFER TO: 3160 (UT-922)

May 2, 2008

#### Memorandum

To: Assistant District Manager Minerals, Vernal District

From: Michael Coulthard, Petroleum Engineer

Subject: 2008 Plan of Development Sundance Unit,

Uintah County, Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following wells are planned for calendar year 2008 within the Sundance Unit, Uintah County, Utah.

API# WELL NAME LOCATION

(Proposed PZ Green River)

43-047-40027 Sundance Fed S-11-9-17 Sec 11 T09S R17E 0689 FSL 0845 FEL BHL Sec 11 T09S R17E 1505 FSL 1440 FEL

43-047-40028 Sundance Fed N-11-9-17 Sec 11 T09S R17E 2017 FNL 2073 FWL BHL Sec 11 T09S R17E 2635 FSL 1330 FWL

43-047-40029 Sundance Fed I-11-9-17 Sec 11 T09S R17E 0712 FNL 1989 FEL BHL Sec 11 T09S R17E 1340 FNL 1295 FEL

43-047-40030 Sundance Fed I-12-9-17 Sec 12 T09S R17E 1962 FNL 0677 FEL BHL Sec 12 T09S R17E 1220 FNL 1275 FEL

43-047-40031 Sundance Fed B-12-9-17 Sec 12 T09S R17E 0451 FNL 1939 FEL BHL Sec 12 T09S R17E 0050 FNL 1160 FEL

We have no objections to permitting the wells so long as the unit operator receives an exception to the locating and siting requirements of the State of Utah (R649-3-2).



May 1, 2008

State of Utah, Division of Oil, Gas and Mining ATTN: Diana Mason PO Box 145801 Salt Lake City, UT 84114-5801

RE:

Directional Drilling

Sundance Federal B-12-9-17

Sundance Unit UTU-82472X

Surface Hole:

T9S R17E, Section 12: NWNE

451' FNL 1939' FEL

Bottom Hole:

T9S R17E, Section 12

50' FNL 1160' FEL

Uintah County, Utah

Dear Ms. Mason;

Pursuant to the filing of Newfield Production Company's ("NPC") Application for Permit to Drill dated April 22, 2008, a copy of which is attached, for the above referenced well, and in accordance with Oil and Gas Conservation Rule R649-3-11, NPC hereby submits this letter as notice of our intention to directionally drill this well.

The surface hole location and bottom hole location of this well are both within the boundaries of the Sundance Federal Unit UTU-82472X. Newfield certifies that it is the Sundance Unit Operator and all lands within 460 feet of the entire directional well bore are within the Sundance Unit.

NPC is permitting this well as a directional well in order to minimize surface disturbance. By directionally drilling from the referenced surface location, NPC will be able to utilize the existing roads and pipelines in this area.

NPC hereby requests our application for permit to drill be granted pursuant to R649-3-11. If you have any questions or require further information, please do not hesitate to contact the undersigned at 303-382-4444 or by email at <a href="mailto:reveland@newfield.com">reveland@newfield.com</a>. Your consideration of this matter is greatly appreciated.

Sincerely,

Roxann Eveland
Land Associate

MAY 0 5 2008

DIV. OF OIL, GAS & MINING

Form 3160-3 (September 2001)	·		OMB No	APPROVEI b. 1004-013 nuary 31, 20	36	
UNITED STATE DEPARTMENT OF THE I BUREAU OF LAND MANA	5. Lease Serial No.	39713				
APPLICATION FOR PERMIT TO D		6. If Indian, Allotte		Name		
la. Type of Work: 🔟 DRILL 🔲 REENTE	ER		7. If Unit or CA Agre Sundance Unit	eement, Na	ame and No.	
1b. Type of Well:  Oil Well  Gas Well  Other	m =		8. Lease Name and V	Vell No.		
1b. Type of Well: Soil Well Gas Well Other  2. Name of Operator	Single Zone 🚨 Mult	iple Zone	Sundance Federal	B-12-9-17	7	
Newfield Production Company			9. API Well No.			
3a. Address	3b. Phone No. (include area code)		10. Field and Pool, or	Explorator	~	
Route #3 Box 3630, Myton UT 84052	(435) 646-3721		Monument Bu	•	J	
4. Location of Well (Report location clearly and in accordance with	any State requirements.*)		11. Sec., T., R., M., or	Blk. and S	Survey or Area	
At surface NW/NE 451' FNL 1939' FEL  At proposed prod. zone 50' FNL 1160' FEL			Sec. 12, T9S	R17E		
14. Distance in miles and direction from nearest town or post office*			12. County or Parish		13. State	
Approximatley 17.7 miles southeast of Myton, Utah			Uintah		UT	
<ol> <li>Distance from proposed*         location to nearest property or lease line, ft.         (Also to nearest drig, unit line, if any)         Approx. 50' ffse, 10,510' ffunit     </li> </ol>	ine, ft.					
18. Distance from proposed location*	1,120.00	20 DENGE	20 Acres			
to nearest well, drilling, completed, applied for, on this lease, ft.  Approx. 1169'	19. Proposed Depth 5965'		/BIA Bond No. on file NYB000493			
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approximate date work will sta	rt*	23. Estimated duration			
5011' GL	3rd Quarter 2008		Approximately seven (7) days f	from spud to rig	g release.	
· · · · · · · · · · · · · · · · · · ·	24. Attachments					
The following, completed in accordance with the requirements of Onshor	e Oil and Gas Order No.1, shall be at	ached to this	form;			
<ol> <li>Well plat certified by a registered surveyor.</li> <li>A Drilling Plan.</li> <li>A Surface Use Plan (if the location is on National Forest System SUPO shall be filed with the appropriate Forest Service Office).</li> </ol>	Item 20 above).  Lands, the 5. Operator certific	ation. specific info	s unless covered by an o		·	
25. Signature	Name (Printed/Typed)		<u></u>	Date		
1 lande roxes	Mandie Crozier		1 1	4/22/08		
Regulatory Specialist						
Approved by (Signature)	Name (Printed/Typed)		1	Date	7.	
Title	Office		1			
application approval does not warrant or certify the the applicant holds lead perations thereon.  Conditions of approval, if any, are attached.	gal or equitable title to those rights in	the subject le	ease which would entitle	the applica	ant to conduct	
itle 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a tates any false, fictitious or fraudulent statements or representations as to	crime for any person knowingly and any matter within its jurisdiction.	l willfully to	make to any departmen	t or agenc	y of the United	
(Instructions on reverse)				<u> </u>		

RECEIVED

MAY 0 5 2008

DIV. OF OIL, GAS & MINING

## T9S, R17E, S.L.B.&M.

N89°58'W - 80.10 (G.L.O.) 1910 S89°49'55"W - 2642.31' (Meas.) N89°59'39"W - 2642.73' (Meas.) Brass Cap Rebar 1160' Brass Cap Detail At 10 Bottom Left of Hole 1939' Well Head of Hole DRILLING WINDOW 2641.30° W G.L.O. etail 10.00N No Scale (G.L.O.) 1910 NO.01'W Brass Cap 1910 Brass Cap WELL LOCATION: SUNDANCE B-12-9-17 ELEV. EXIST. GRADED GROUND = 5011' W.. 91, ZO. 00N 1910 Brass Can 1910 Brass Cap N89°53'56"W - 2647.07' (Meas.) 589'54'44"W - 2640.60' (Meas.) N89'59'W - 80.04 (G.L.O.)

= SECTION CORNERS LOCATED

BASIS OF ELEV; U.S.G.S. 7-1/2 min QUAD (PARIETTE DRAW SW) SUNDANCE B-12-9-17 (Surface Location) NAD 83 LATITUDE = 40°03′05.19" LONGITUDE = 109°57′08.84"

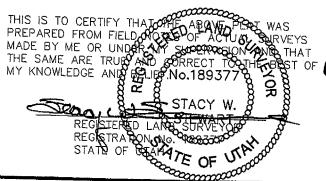
## NEWFIELD PRODUCTION COMPANY

WELL LOCATION, SUNDANCE B-12-9-17, LOCATED AS SHOWN IN THE NW 1/4 NE 1/4 OF SECTION 12, T9S, R17E, S.L.B.&M. UINTAH COUNTY, UTAH.



#### Note:

1. The bottom of hole footages are 50' FNL & 1160' FEL.



## TRI STATE LAND SURVEYING & CONSULTING

180 NORTH VERNAL AVE. - VERNAL, UTAH 84078 (435) 781-2501

DATE SURVEYED: 01-16-08	SURVEYED BY: T.H.
DATE DRAWN: 02-27-08	DRAWN BY: F.T.M.
REVISED:	SCALE: 1" = 1000'



Lieutenant Governor

# State of Utah DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA Division Director

May 5, 2008

Newfield Production Company Rt. #3, Box 3630 Myton, UT 84052

Re:

Sundance Federal B-12-9-17 Well, Surface Location 451' FNL, 1939' FEL, NW NE, Sec. 12, T. 9 South, R. 17 East, Bottom Location 50' FNL, 1160' SEL, NE NE, Sec. 12, T. 9 South, R. 17 East, Uintah County, Utah

#### Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann.§ 40-6-1 et seq., Utah Administrative Code R649-3-1 et seq., and the attached Conditions of Approval, approval to drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-047-40031.

Sincerely,

Gil Hunt

Associate Director

Stilth

pab Enclosures

cc:

**Uintah County Assessor** 

Bureau of Land Management, Vernal Office



Operator:	Newfield Production Company		
Well Name & Number	Sundance Federal B-12-9-17		
API Number:	43-047-40031		
Lease:	UTU-39713		
Surface Location: NW NE Bottom Location: NE NE	Sec. 12 Sec. 12	T. 9 South T. 9 South	<b>R.</b> 17 East <b>R.</b> 17 East

#### **Conditions of Approval**

#### 1. General

Compliance with the requirements of Utah Admin. R. 649-1 *et seq.*, the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

#### 2. Notification Requirements

Notify the Division within 24 hours of spudding the well.

Contact Carol Daniels at (801) 538-5284

Notify the Division prior to commencing operations to plug and abandon the well.

• Contact Dustin Doucet at (801) 538-5281 (801) 733-0983 home

#### 3. Reporting Requirements

All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

- 4. State approval of this well does not supersede the required federal approval, which must be obtained prior to drilling.
- 5. In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

## RECEIVED

APR 2 9 2008

Form 3160-3 (September 2001)

UNITED STATES DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MAN** 

FORM APPROVED OMB No. 1004-0136 Expires January 31, 2004

BUREAU OF LAND MANA	GEMENT	JLM YI	JUFUF3971	3
APPLICATION FOR PERMIT TO DRILL OR REENTER			6. If Indian, Allottee or Tribe Name N/A	
la. Type of Work: I DRILL REENTE	R		7. If Unit or CA Agreemen Sundance Unit	t, Name and No.
lb. Type of Well: Oil Well Gas Well Other	Single Zone  Multi	ple Zone	Lease Name and Well N     Sundance Federal B-12-	
2. Name of Operator			9. API Well No.	
Newfield Production Company			43-047-400	3/
3a. Address	3b. Phone No. (include area code)		10. Field and Pool, or Explo	
Route #3 Box 3630, Myton UT 84052	(435) 646-3721		Monument Butte	
4. Location of Well (Report location clearly and in accordance with	any State requirements.*)		11. Sec., T., R., M., or Blk.	and Survey or Area
At surface NW/NE 451' FNL 1939' FEL				
At proposed prod. zone 50' FNL 1160' FEL NEN	E		Sec. 12, T9S R17	E
14. Distance in miles and direction from nearest town or post office*			12. County or Parish	13. State
Approximatley 17.7 miles southeast of Myton, Utah			Uintah	UT
15. Distance from proposed* location to nearest	16. No. of Acres in lease	17. Spacin	g Unit dedicated to this well	
property or lease line, ft. (Also to nearest drig. unit line, if any)  Approx. 50' f/lse, 10,510' f/unit	1,120.00		20 Acres	
18. Distance from proposed location*	19. Proposed Depth	20. BLM/I	BIA Bond No. on file	· · · · · ·
to nearest well, drilling, completed, applied for, on this lease, ft.  Approx. 1169'	5965'	\ v	YB000493	
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approximate date work will start* 23. Estimated duration			
5011' GL	3rd Quarter 2008		Approximately seven (7) days from sp	oud to rig release.
	24. Attachments			
The following, completed in accordance with the requirements of Onsho	ore Oil and Gas Order No.1, shall be at	tached to this	s form;	
Well plat certified by a registered surveyor.	4. Bond to cover t	he operation	ns unless covered by anexist	ing bond on file (see
2 A Drilling Plan	Item 20 above).	•		- '

- 1. Well plat certified by a registered surveyor.
- 2. A Drilling Plan.
- 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
- Operator certification.
- Such other site specific information and/or plans as may be required by the

	authorized officer.	
25. Signature	Name (Printed/Typed)	Date
_ / landel veza	Mandie Crozier	1 4/22/08
Regulatory Specialist O		L
Approved by (Signature)	Name (Printed/Typed)	Date
My Harry	Jean KewaKA	AUG 14 ZUU8
Title Assistant Field Manager	Office VERNAL FIELD OFFICE	e
Lands & Mineral Resources	APLANTE LIEPTO OLLIC	۲ <b>۵</b> (

Application approval does not warrant or certify the the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached.

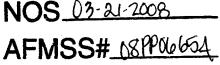
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

\*(Instructions on reverse)

NOTICE OF APPROVAL

RECEIVED AUG 19 2008

DIV. OF OIL, GAS & MINING







#### UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT VERNAL FIELD OFFICE

VERNAL, UT 84078

(435) 781-4400



#### CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL

**Company:** Newfield Production Company

Location:

NWNE, Sec. 12, T9S, R17E(S)

NENE, Sec. 12, T9S, R17E(B)

Well No:

**Sundance Federal B-12-9-17** 

Lease No:

UTU-39713

API No: 4

43-047-40031

Agreement:

**Sundance Unit** 

Title	Name	Office Phone Number	Cell Phone Number
Petroleum Engineer:	Matt Baker	(435) 781-4490	(435) 828-4470
Petroleum Engineer:	Michael Lee	(435) 781-4432	(435) 828-7875
Petroleum Engineer:	James Ashley	(435) 781-4470	(435) 828-7874
Petroleum Engineer:	Ryan Angus	(435) 781-4430	(435) 828-7368
Supervisory Petroleum Technician:	Jamie Sparger	(435) 781-4502	(435) 828-3913
Supervisory NRS:	Karl Wright	(435) 781-4484	(435) 828-7381
NRS/Enviro Scientist:	Holly Villa	(435) 781-4404	(435) 828-3544
NRS/Enviro Scientist:	James Hereford	(435) 781-3412	
NRS/Enviro Scientist:	Chuck Macdonald	(435) 781-4441	(435) 828-7481
NRS/Enviro Scientist:	Dan Emmett	(435) 781-3414	, ,
NRS/Enviro Scientist:	Paul Percival	(435) 781-4493	
NRS/Enviro Scientist:	Michael Cutler	(435) 781-3401	(435) 828-3546
NRS/Enviro Scientist:	Anna Figueroa	(435) 781-3407	(435) 828-3548
NRS/Enviro Scientist:	Verlyn Pindell	(435) 781-3402	(435) 828-3547
NRS/Enviro Scientist:	Darren Williams	(435) 781-4447	(435) 828-4029
NRS/Enviro Scientist:	Nathan Packer	(435) 781-3405	(435) 828-3545
		Trans (425) 701 2400	

Fax: (435) 781-3420

## A COPY OF THESE CONDITIONS SHALL BE FURNISHED TO YOUR FIELD REPRESENTATIVE TO INSURE COMPLIANCE

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (43 CFR Part 3160), and this approved Application for Permit to Drill including Surface and Downhole Conditions of Approval. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction, drilling, and completion operations. This permit is approved for a two (2) year period, or until lease expiration, whichever occurs first. An additional extension, up to two (2) years, may be applied for by sundry notice prior to expiration.

NOTIFICATION REQUIREMENTS

747	JIIII.	ATION REQUIREMENTS
Location Construction	-	Forty-Eight (48) hours prior to construction of location and
(Notify Environmental Scientist)		access roads.
Location Completion	-	Prior to moving on the drilling rig.
(Notify Environmental Scientist)		
Spud Notice	-	Twenty-Four (24) hours prior to spudding the well.
(Notify Petroleum Engineer)		
Casing String & Cementing	-	Twenty-Four (24) hours prior to running casing and cementing
(Notify Supv. Petroleum Tech.)		all casing strings.
BOP & Related Equipment Tests	-	Twenty-Four (24) hours prior to initiating pressure tests.
(Notify Supv. Petroleum Tech.)		
First Production Notice	-	Within Five (5) business days after new well begins or
(Notify Petroleum Engineer)		production resumes after well has been off production for more
		than ninety (90) days.

#### SURFACE USE PROGRAM CONDITIONS OF APPROVAL (COAs)

- If there is an active Gilsonite mining operation within 2 miles of the well location, operator shall notify the Gilsonite operator at least 48 hours prior to any blasting during construction.
- If paleontological materials are uncovered during construction, the operator is to immediately stop work and contact the Authorized Officer (AO). A determination will be made by the AO as to what mitigation may be necessary for the discovered paleontologic material before construction can continue.

#### **SITE SPECIFIC COAs:**

#### STIPULATIONS:

1. None

#### **Lease Notices from RMP:**

- 2. The lessee/operator is given notice the area has been identified as containing Golden eagle habitat. Modifications may be required in the Surface Use Plan to protect the Golden eagle and/or its habitat from surface disturbance activities in accordance with Section 6 of the lease terms, Endangered Species Act, and 43 CFR 3101.1-2.
- 3. The lessee/operator is given notice the area has been identified as containing Ferruginous hawk habitat. Modifications may be required in the Surface Use Plan to protect the Ferruginous hawk and/or its habitat from surface disturbance activities in accordance with section 6 of the lease terms, Endangered Species Act, and 43 CFR 3101.1-2.

#### **Comments:**

- 1. This project will be a Categorical Exclusion to the Castle Peak and Eight Mile Flat Oil and Gas Expansion project EIS (August 2005).
- 2. No raptor nests are within ½ mile of the project area.
- 3. Mountain ployer timing restrictions were not applied to the Project area as the area has already been disturbed and the location will be directionally drilled from an existing location.

#### Follow-up Actions and/or Recommendations:

Please be aware that this Special Status Species wildlife clearance is effective for 1 year from the date of the onsite date. Any proposals submitted after the date of this report (onsite) shall require additional surveys and clearances.

#### **CONDITIONS OF APPROVAL:**

- All traffic related to this action will be restricted to approved routes. Cross-country vehicle travel will not be allowed.
- All pipelines (surface and buried) will be laid within one 50' wide construction ROW, on one side of the road, and will reduce down to a 30' wide permanent ROW on lease.
- A temporary road ROW will not be granted. The road ROW will be 30 foot for construction and will reduce to an 18 foot running surface.

Page 3 of 10 Well: Sundance Fed B-12-9-17 8/13/2008

- The access road will be crowned and ditched. Flat-bladed roads are not allowed. All roads will have an 18', crowned (2 to 3% minimum), running surface. All roads will have drainage ditches along both sides of road.
- No vehicle travel, construction or routine maintenance activities shall be performed during periods when the soil is too wet to adequately support vehicles and/or construction equipment. If such equipment creates ruts in excess of three inches deep, the soil shall be deemed too wet to adequately support construction equipment.
- If additional erosion occurs during the life of this project, more culverts, low water crossings, berms, wing ditches or etc. will be needed to control the erosion.
- Low-water crossings will be appropriately constructed to avoid sedimentation of drainage ways and other water resources.
- Pipelines will be buried at all major drainage crossings.
- Prevent fill and stock piles from entering drainages.
- To insure impermeability, the reserve pit will be lined with a 16 ml or greater liner and felt prior to spudding.
- The liner is to be cut 5 feet below ground surface or at the level of the cuttings, whichever is deeper, and the excess liner material is to be disposed of at an authorized disposal site.
- When the reserve pit contains fluids or toxic substances, the operator must ensure animals do not ingest or become entrapped in pit fluids.
- Any hydrocarbons in the reserve pit will be removed **immediately** upon well completion; in accordance with 43 CFR 3162.7-1. Pits must be free of oil and other liquid and solid wastes prior to filling.
- Monument Butte SOP, Section 9.2 Pit Fencing Minimum Standards will be strictly adhered to. To include 9.2.2.3 Corner posts will be cemented and/or braced in such a manner as to keep fence tight at all times.
- If Uinta Basin hookless cactus or other special status plants are found, construction will cease and the AO will be notified to determine the appropriate mitigation.
- Within 90 calendar days of the approval date for this Application for Permit to Drill (APD), the operator/lessee shall submit to the Authorized Officer (AO), an Interim/Final Surface Reclamation Plan for surface disturbance on well pads, access roads, and pipelines. At a minimum, this will include the reshaping of the pad to the original contour to the extent possible; the respreading of the top soil up to the rig anchor points; and, the area reseeded using appropriate reclamation methods. The AO will provide written approval or concurrence within 30 calendar days of receipt.

#### • Interim Reclamation:

The topsoil from the reserve pit shall be stripped and piled separately near the reserve pit. When the reserve pit is closed, it shall be re-contoured and the topsoil re-spread, and the area shall be **seeded using a rangeland drill**. Seeding depth as per AO, or seed distributor. If portions of the site are too steep (>40%), or rocky, that portion may be broadcast seeded. If broadcasting seed, the seed shall be walked into the soil with a dozer immediately after the seeding is completed, or covered by soil using a drag chain. Seeding shall occur in the fall (August 1<sup>st</sup> until snow or ground is frozen) with the following seed mix:

#### Seed mix:

Common name	Latin name	lbs/acre	Recommended seed planting depth
Squirreltail grass	Elymus elymoides	3.0	1/4 - 1/2"
Siberian wheatgrass	Agropyron fragile	1.0	1/2"
Shadscale saltbush	Atriplex confertifolia	0.50	1/2"
Four-wing saltbush	Atriplex canescens	0.50	1/2"
Gardner's saltbush	Atriplex gardneri	0.50	1/2"
Scarlet globemallow	Sphaeralcea coccinea	0.10	1/8 - 1/4"

- All pounds are pure live seed.
- All seed and mulch will be certified weed free.
  - Rates are set for drill seeding; double rate if broadcasting.
  - Reseeding may be required if initial seeding is not successful.

#### • Final reclamation:

Once the location is plugged and abandoned, the well location, access, and any disturbed areas shall be recontoured to natural topography, topsoil shall be re-spread, and the entire location shall be seeded following guidelines in the seed mix bullet statement above. Final seed mix: same as interim.

- Noxious and/or invasive weeds will be controlled along access roads, pipelines, well sites, and all other
  applicable facilities. Any noxious and/or invasive weeds outbreak, directly attributed to the activities of
  the Operator, will be the responsibility of the Operator to control. On BLM administered land, a Pesticide
  Use Proposal (PUP) must be submitted and approved prior to the application of herbicides, pesticides, or
  other possibly hazardous chemicals.
- The topsoil from the reserve pit shall be stripped and piled separately near the reserve pit. When the reserve pit is closed, it shall be re-contoured and the topsoil re-spread, and the area shall be seeded in the same manner as the location topsoil.
- Once the location is plugged and abandoned, it shall be re-contoured to natural topology, topsoil shall be re-spread, and the entire location shall be seeded with a seed mix recommended by the AO (see above).
   Seed application will follow all guidelines in the interim seed mix bullet statement above. If reclamation seeding should take place using the broadcast method, the seed at a minimum will be walked into the soil with a dozer immediately after the seeding is completed.
- The authorized officer may prohibit surface disturbing activities during severe winter conditions to minimize watershed damage. This limitation does not apply to operation and maintenance of producing wells.

Page 5 of 10 Well: Sundance Fed B-12-9-17 8/13/2008

- The authorized officer may prohibit surface disturbing activities during wet or muddy conditions to minimize watershed damage. This limitation does not apply to operation and maintenance of producing wells.
- All well facilities not regulated by OSHA will be painted Carlsbad Canyon.
- All boulders with a length or diameter greater than 3 feet, that are found showing at the surface, will be stockpiled for use during final reclamation.
- Notify the Authorized Officer 48 hours prior to surface disturbing activities.

## DOWNHOLE PROGRAM CONDITIONS OF APPROVAL (COAs)

#### SITE SPECIFIC DOWNHOLE COAs:

 Newfield Production Co. shall adhere to all referenced requirements in the SOP along with all Oil and Gas rules and requirements listed in the Code of Federal Regulations and all Federal Onshore Oil and Gas Orders. A complete angular deviation and directional survey report shall be submitted to the Vernal BLM field office within 30 days following the completion of the well.

All provisions outlined in Onshore Oil & Gas Order #2 Drilling Operations shall be strictly adhered to. The following items are emphasized:

#### DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS

- The spud date and time shall be reported orally to Vernal Field Office within 24 hours of spudding.
- Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.
- All requirements listed in Onshore Order #2 III. E. Special Drilling Operations are applicable for air drilling of surface hole.
- Blowout prevention equipment (BOPE) shall remain in use until the well is completed or abandoned. Closing unit controls shall remain unobstructed and readily accessible at all times. Choke manifolds shall be located outside of the rig substructure.
- All BOPE components shall be inspected daily and those inspections shall be recorded in the daily drilling report. Components shall be operated and tested as required by Onshore Oil & Gas Order No. 2 to insure good mechanical working order. All BOPE pressure tests shall be performed by a test pump with a chart recorder and **NOT** by the rig pumps. Test shall be reported in the driller's log.
- BOP drills shall be initially conducted by each drilling crew within 24 hours of drilling out from under the surface casing and weekly thereafter as specified in Onshore Oil & Gas Order No. 2.
- Casing pressure tests are required before drilling out from under all casing strings set and cemented in place.
- No aggressive/fresh hard-banded drill pipe shall be used within casing.
- Cement baskets shall not be run on surface casing.

- The operator must report all shows of water or water-bearing sands to the BLM. If flowing water is encountered it must be sampled, analyzed, and a copy of the analyses submitted to the BLM Vernal Field Office.
- The operator must report encounters of all non oil & gas mineral resources (such as Gilsonite, tar sands, oil shale, trona, etc.) to the Vernal Field Office, in writing, within 5 working days of each encounter. Each report shall include the well name/number, well location, date and depth (from KB or GL) of encounter, vertical footage of the encounter and, the name of the person making the report (along with a telephone number) should the BLM need to obtain additional information.
- A complete set of angular deviation and directional surveys of a directional well will be submitted to the Vernal BLM office engineer within 30 days of the completion of the well.
- While actively drilling, chronologic drilling progress reports shall be filed directly with the BLM, Vernal Field Office on a weekly basis in sundry, letter format or e-mail to the Petroleum Engineers until the well is completed.
- A cement bond log (CBL) will be run from the production casing shoe to the <u>top of cement</u> and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.
- Please submit an electronic copy of all other logs run on this well in LAS format to UT\_VN\_Welllogs@BLM.gov. This submission will supersede the requirement for submittal of paper logs to the BLM.
- There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. Any changes in operation must have prior approval from the BLM Vernal Field Office.

#### **OPERATING REQUIREMENT REMINDERS:**

- All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well.
- In accordance with 43 CFR 3162.4-3, this well shall be reported on the "Monthly Report of Operations" (Oil and Gas Operations Report ((OGOR)) starting with the month in which operations commence and continue each month until the well is physically plugged and abandoned. This report shall be filed in duplicate, directly with the Minerals Management Service, P.O. Box 17110, Denver, Colorado 80217-0110, or call 1-800-525-7922 (303) 231-3650 for reporting information.
- Should the well be successfully completed for production, the BLM Vernal Field office must be notified when it is placed in a producing status. Such notification will be by written communication and must be received in this office by not later than the fifth business day following the date on which the well is placed on production. The notification shall provide, as a minimum, the following informational items:
  - Operator name, address, and telephone number.
  - Well name and number.
  - o Well location (1/41/4, Sec., Twn, Rng, and P.M.).
  - Date well was placed in a producing status (date of first production for which royalty will be paid).
  - The nature of the well's production, (i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons).
  - o The Federal or Indian lease prefix and number on which the well is located; otherwise the non-Federal or non-Indian land category, i.e., State or private.
  - O Unit agreement and/or participating area name and number, if applicable.
  - o Communitization agreement number, if applicable.
- Any venting or flaring of gas shall be done in accordance with Notice to Lessees (NTL) 4A and needs prior approval from the BLM Vernal Field Office.
- All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL 3A will be reported to the BLM, Vernal Field Office. Major events, as defined in NTL3A, shall be reported verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will be reported in writing within 15 days. "Minor Events" will be reported on the Monthly Report of Operations and Production.

- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (BLM Form 3160-4) shall be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, shall be filed on BLM Form 3160-4. Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include deviation surveys, sample descriptions, strip logs, core data, drill stem test data, and results of production tests if performed. Samples (cuttings, fluid, and/or gas) shall be submitted only when requested by the BLM, Vernal Field Office.
- All off-lease storage, off-lease measurement, or commingling on-lease or off-lease, shall have prior written approval from the BLM Vernal Field Office.
- Oil and gas meters shall be calibrated in place prior to any deliveries. The BLM Vernal Field Office Petroleum Engineers will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports shall be submitted to the BLM Vernal Field Office. All measurement facilities will conform to the API standards for liquid hydrocarbons and the AGA standards for natural gas measurement. All measurement points shall be identified as the point of sale or allocation for royalty purposes.
- A schematic facilities diagram as required by Onshore Oil & Gas Order No. 3 shall be submitted
  to the BLM Vernal Field Office within 30 days of installation or first production, whichever
  occurs first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be
  adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively
  sealed in accordance with Onshore Oil & Gas Order No. 3.
- Any additional construction, reconstruction, or alterations of facilities, including roads, gathering lines, batteries, etc., which will result in the disturbance of new ground, shall require the filing of a suitable plan and need prior approval of the BLM Vernal Field Office. Emergency approval may be obtained orally, but such approval does not waive the written report requirement.
- No location shall be constructed or moved, no well shall be plugged, and no drilling or workover
  equipment shall be removed from a well to be placed in a suspended status without prior
  approval of the BLM Vernal Field Office. If operations are to be suspended for more than 30
  days, prior approval of the BLM Vernal Field Office shall be obtained and notification given
  before resumption of operations.
- Pursuant to Onshore Oil & Gas Order No. 7, this is authorization for pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by this office and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method shall be submitted along with any necessary water analyses, as soon as possible, but no later than 45 days after the date of first production. Any method of disposal which has not been approved prior to the end of the authorized 90-day period will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by this office.

Page 10 of 10 Well: Sundance Fed B-12-9-17 8/13/2008

• Unless the plugging is to take place immediately upon receipt of oral approval, the Field Office Petroleum Engineers must be notified at least 24 hours in advance of the plugging of the well, in order that a representative may witness plugging operations. If a well is suspended or abandoned, all pits must be fenced immediately until they are backfilled. The "Subsequent Report of Abandonment" (Form BLM 3160-5) must be submitted within 30 days after the actual plugging of the well bore, showing location of plugs, amount of cement in each, and amount of casing left in hole, and the current status of the surface restoration.

STATE OF UTAH	
DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING  5.LEASE DESIGNATION AND SERIAL UTU-39713	IUMBER:
SUNDRY NOTICES AND REPORTS ON WELLS  6. IF INDIAN, ALLOTTEE OR TRIBE N	ME:
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.  7.UNIT or CA AGREEMENT NAME: SUNDANCE (GRRV)	
1. TYPE OF WELL Oil Well  8. WELL NAME and NUMBER: SUNDANCE FED B-12-9-17	
2. NAME OF OPERATOR: NEWFIELD PRODUCTION COMPANY  9. API NUMBER: 43047400310000	
3. ADDRESS OF OPERATOR: PHONE NUMBER: 9. FIELD and POOL or WILDCAT: 8 MILE FLAT NORTH	
4. LOCATION OF WELL FOOTAGES AT SURFACE: UINTAH UINTAH	
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NWNE Section: 12 Township: 09.0S Range: 17.0E Meridian: S  UTAH	
CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA	
TYPE OF SUBMISSION TYPE OF ACTION	
☐ ACIDIZE ☐ ALTER CASING ☐ CASING REPAIR	
NOTICE OF INTENT Approximate date work will start:  CHANGE TO PREVIOUS PLANS  CHANGE TUBING  CHANGE TUBING  CHANGE WELL NAME	
CHANGE WELL STATUS COMMINGLE PRODUCING FORMATIONS CONVERT WELL TYPE	
SUBSEQUENT REPORT Date of Work Completion: FRACTURE TREAT NEW CONSTRUCTION	
☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐	
	ON
Date of Spud:	
U TUBING REPAIR U VENT OR FLARE U WATER DISPOSAL	
□ DRILLING REPORT □ WATER SHUTOFF □ SI TA STATUS EXTENSION ✓ APD EXTENSION Report Date: □	
☐ WILDCAT WELL DETERMINATION ☐ OTHER:	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.  Newfield requests permission to extend the Permit to Drill this well for one	
year. Approved by the	
Utah Division of	
Oil, Gas and Mining	
<b>Date:</b> May 11, 2009	
By: Down Hill	
NAME (PLEASE PRINT) Mandie Crozier PHONE NUMBER Regulatory Tech	
SIGNATURE         DATE           N/A         5/4/2009	



#### The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

**Electronic Permitting System - Sundry Notices** 

## Request for Permit Extension Validation Well Number 43047400310000

**API:** 43047400310000

Well Name: SUNDANCE FED B-12-9-17

Location: 0451 FNL 1939 FEL QTR NWNE SEC 12 TWNP 090S RNG 170E MER S

Company Permit Issued to: NEWFIELD PRODUCTION COMPANY

**Date Original Permit Issued:** 5/5/2008

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

me revision. Following is a checklist of some items related to the application, which should be verified.
<ul> <li>If located on private land, has the ownership changed, if so, has the surface agreement been updated?</li> <li>Yes</li> <li>No</li> </ul>
• Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location?  Yes No
• Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well?  Yes No
<ul> <li>Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location?  Yes No</li> </ul>
• Has the approved source of water for drilling changed?   Yes  No
<ul> <li>Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation?</li> <li>Yes</li> <li>No</li> </ul>
• Is bonding still in place, which covers this proposed well?   • Yes   • No Utah Division of Oil, Gas and Mining

**Signature:** Mandie Crozier **Date:** 5/5/2009

Title: Regulatory Tech Representing: NEWFIELD PRODUCTION COMPANY Date: May 11, 2009

Bv:

## BLM - Vernal Field Office - Notification Form

Operator Newfield Exploration

Rig Name/# Ross #29

Submitted By Mitch Benson

Phone Number (435) 823-5885

Name/Numer Sundance Federal B-12-9-17

Qtr/Qrt NW/NE Section 12

Township 9S

Range 17E

Lease Serial Number UTU-39713

API Number 43-047-40031

Spud Notice - Spud is the initial spudding of the well, not drilling out below a casing string.

Date/Time 4/17/2010 9:00:00 AM

<u>Casing</u> – Please report time casing run starts, not cementing times.

> **Surface Casing** X

> > **Intermediate**

**Production Casing** 

Liner

Other

Date/Time 4/17/2010 4:00:00 PM

## Remarks:

OPERATOR ACCT. NO.

N2695

CURRENT ENTITY NO.	NEW ENTITY NO.	API NUMBER	WELL NAME	WELL LOCATION			SPUD	EFFECTIVE		
	V		200	- QQ	SC	IP	RG	COUNTY	DATE	DATE
99999	17400	4301334202	WEST POINT 13-31-8-16	swsw	31	88	16E	DUCHESNE	4/10/2010	4/28/10
OMMENTS:	N. 1									/ /
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ENTITY NO.	1	API NUMBER	WELL NAME						SPUD	EFFECTIVE
				QQ	SC	117	RG	COUNTY	DATE	DATE
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0 001										100
GRAV									*	
CURRENT ENTITY NO.	NEW ENTITY NO.	API NUMBER	WELL NAME	90	Se	WELL	LOCATION	COUNTY	SPUD	EFFECTIVE
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99999	17400	4304740031		NWNE	12	96	175	LUNITAL	4/47/0040	11/50/10
			12-12-11	IAAAIAE	12	30	175	UINTAH	4/1//2010	17/28/10
CARALL			711	. 1.	1 2 5 2				~	
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00000				]				U/NTAH		1/401
	17400	4304340027	SUNDANCE S-11-9-17	SESE	11	95	17E	DUCHESNE	4/13/2010	4/28/10
GRRV			711 =	111.70						7 7
	NEW	ADIAU MADED		14003	٠ <u>ر</u>					
ENTITY NO.	ENTITY NO.	AFINOMOER	WELL NAME	90	sc T			COLINTY		EFFECTIVE
					- 50		NO .	COONIT	UAIE	DATE
99999	17527	4304350204	LITE TOIDAL 2 24 A 4	NES NA		40	4386			11/20/
	11001	4001330204	01E 1RIBAL 3-21-4-1	NEWAA	21	45	177	DUCHESNE	4/13/2010	7/28/10
000	,									/ /
OKIW	•									
CURRENT	NEW	AP! NUMBER	WEII NAME	I		18/514.1	0047:01			
ENTITY NO.	ENTITY NO.		V	_qq	sc	TP	RG	COUNTY		EFFECTIVE DATE
										1 ,
99999	17588	4301334048	UTE TRIBAL 12-30-4-2	NWSW	30	48	21//	DUCHESNE	4/40/2040	4/28/10
MMENTS:		·			50		417	DOGITORE	7/10/2010	1/00/10
$C_{-}OPV$ , AMPINITIAL								NTIAL		
									JUNFIUE	NIIAL
DDES (See instructions on back new entity for new well (single v	( of form) veli aniv)					*		La 11/	77111.138	
	SPECIAL STATE OF THE PRINTER NO.  99999  CURRENT ENTITY NO.  99999  DMMENTS:  CURRENT ENTITY NO.  99999	### STITTY NO.   ENTITY NO.    99999   17400    CURRENT   NEW ENTITY NO.    99999   17586    CURRENT   NEW ENTITY NO.    99999   17400    CURRENT   NEW ENTITY NO.    99999   17400    CURRENT   NEW ENTITY NO.    99999   17400    CURRENT   NEW ENTITY NO.    99999   17587    CURRENT   NEW ENTITY NO.    99999   17587    CURRENT   NEW ENTITY NO.    99999   17588    CURRENT   NEW ENTITY NO.    99999   17588    CURRENT   NEW ENTITY NO.    99999   17588	SPECIFIC NEW   SPINUMBER   S	STATE   STAT	Sentity No.   Sentity No.	Sentity No.   Sentity No.	SHITTY NO.	### SHITTY NO. #### SHITTY NO. ###################################	SHITTYRO   SHITTYRO   SPANSON   17400   4301334202   WEST POINT 13-31-8-16   SWSW   31   85   16E   DUCHESNE	SHITTY NO

B - 'well to existing entity (group or unit wall)

C - from one existing entity to another existing entity

NOTE: Use COMMENT section to explain why each Action Code was selected.

D - well from one existing entity to a new entity

E - ther (explain in comments section)

RECEIVED APR 2 2 2010

DIV. OF OIL, GAS & MINING

Jentri Park

Production Clerk

04/22/10

FORM 3160-5 (August 2007)

## **UNITED STATES** DEPARTMENT OF THE INTERIOR

FORM APPROVED OMB No. 1004-0137

	Ex	pires: July 31,2010			
SUNDR Do not use t abandoned w	<ul><li>5. Lease Serial No.</li></ul>				
SUBMIT IN	7. If Unit or CA/Agreement, Name and/or				
1. Type of Well Oil Well Gas Well 2. Name of Operator NEWFIELD PRODUCTION CO	Other			8. Well Name and SUNDANCE FEI	No. DERAL B-12-9-17
3a. Address Route 3 Box 3630  Myton, UT 84052  4. Location of Well (Footage, 451' FNL 1939' FEL	9. API Well No. 4304740031 10. Field and Pool, GREATER MB U				
NWNE Section 12 T9S R17E	X APPROPRIATE BOX(E	S) TO INIDICATE NA	TURE OF N	UINTAH, UT OTICE, OR OTI	HER DATA
TYPE OF SUBMISSION			E OF ACTION	· · · · · ·	
☐ Notice of Intent ☐ Subsequent Report ☐ Final Abandonment	Acidize Alter Casing Casing Repair Change Plans Convert to Injector	Deepen Fracture Treat New Construction Plug & Abandon Plug Back	Reclamati	ily Abandon	Water Shut-Off Well Integrity Other Spud Notice
Bond under which the work will be of the involved operations. If the op	or recomplete horizontally, give subsur performed or provide the Bond No. on peration results in a multiple completio e filed only after all requirements, inclu	face locations and measured and file with BLM/BIA. Required so nor recompletion in a new inter-	true vertical depths ubsequent reports sival, a Form 3160-4 suppleted, and the ope	of all pertinent marker hall be filed within 30 of shall be filed once testing	is and zones. Attach the days following completion ng has been completed. nat the site is ready for final

On 4/17/08 MIRU Ross # 29. Spud well @ 9:00 AM. Drill 320' of 12 1/4" hole with air mist. TIH W/ 7 Jt's 8 5/8" J-55 24 # csgn. Set @ 319.69 KB. On 4/21/10 cement with 160 sks of class "G" w/ 2% CaCL2 + 1/4# sk Cello- Flake Mixed @ 15.8 ppg > 1.17 cf/ sk yeild. Returned 4 bbls cement to pit. WOC.

> **RECEIVED** APR 2.7 2010

DIV. OF OIL, GAS & MINING

I hereby certify that the foregoing is true and correct (Printed/ Typed)	Title				
Ryan Crum Signature	Drilling Foreman Date 04/24/2010		<del></del>		
THIS SPACE FOR FEDERAL OR STATE OFFICE USE					
Approved by	Title	Date			
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.					
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any p States any false, fictitious and fraudulent statements or representations as to any matter w		any department or agency of the United			

## **NEWFIELD PRODUCTION COMPANY - CASING & CEMENT REPORT**

			8 5/8"	_CASING SET A	AT	319.69	_		
LAST CASING	14	SET AT		-				Exploration	Company
				••••			ICE B-12-9		
DATUM TO CUT						-	Mon.Butt		
DATUM TO BRA					CONTRAC	TOR & RIG	3 <u>#</u>	Ross Rig #	29
TD DRILLER			GER						
HOLE SIZE	12 1/4"	· · · · · · · · · · · · · · · · · · ·		-					
LOG OF CASIN	G STRING:			·····		<del>,,,,</del>			
PIECES	OD	ITEM - N	IAKE - DES	CRIPTION	WT/FT	GRD	THREAD	CONDT	LENGTH
1		Well Head							0.95
7	8 5/8"	ST&C Cas			24#	J-55	STC	A	307.84
1		Guide Sho	е						0.9
CASING INVENT	TORY BAL.		FEET	JTS	TOTAL LE	NGTH OF	STRING		309.69
TOTAL LENGTH	OF STRIN	G	309.69	7	LESS CUT	OFF PIEC	Ε		2
LESS NON CSG	. ITEMS		1.85		PLUS DAT	UM TO T/C	CUT OFF CS	G	12
PLUS FULL JTS	. LEFT OUT		0		CASING S	ET DEPTH			319.69
	TOTAL		307.84	7	7,				
TOTAL CSG. DEL. (W/O THRDS)			307.84	7	<pre> } COMPA</pre>	RE			
Т	IMING				7				
BEGIN RUN CSG. Spud			9:00 AM	4/17/2010	GOOD CIR	C THRU J	OB	Yes	
CSG. IN HOLE			2:00 PM	4/17/2010	Bbls CMT (	CIRC TO S	URFACE	4	
BEGIN CIRC			3:35 PM	4/21/2010	RECIPROC	CATED PIP	No_No		
BEGIN PUMP C	ИT		3:46 PM	4/21/2010			<del></del>		
BEGIN DSPL. CI	MT		3:57 PM	4/21/2010	BUMPED F	LUG TO _	550		

4:04 PM

4/21/2010

PLUG DOWN

CEMENT US	ED	CEME	NT COMPANY-	BJ Services	
STAGE	# SX	CEME	VT TYPE & ADDIT	IVES	
	1 160	C	Class "G"+2%CaCl+.25	#skCelloFlakeMixed@15.8ppgW	1
			1.17yield,r	eturned 4bbls to pit	
CENTRALIZE	R & SCRATCHER PI	ACEMENT		SHOW MAKE & SPACE	NG
Middle First,	top of second and	third for a total of three	)		
COMPANY R	EPRESENTATIVE	Ryan Crum		DATE_	4/21/2010

STATE OF UTAH	
DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING  5.LEASE DESIGNATION AND SERIAL UTU-39713	IUMBER:
SUNDRY NOTICES AND REPORTS ON WELLS  6. IF INDIAN, ALLOTTEE OR TRIBE N	ME:
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.  7.UNIT or CA AGREEMENT NAME: SUNDANCE (GRRV)	
1. TYPE OF WELL Oil Well  8. WELL NAME and NUMBER: SUNDANCE FED B-12-9-17	
2. NAME OF OPERATOR: NEWFIELD PRODUCTION COMPANY  9. API NUMBER: 43047400310000	
3. ADDRESS OF OPERATOR: PHONE NUMBER: 9. FIELD and POOL or WILDCAT: 8 MILE FLAT NORTH	
4. LOCATION OF WELL FOOTAGES AT SURFACE: UINTAH UINTAH	
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NWNE Section: 12 Township: 09.0S Range: 17.0E Meridian: S  UTAH	
CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA	
TYPE OF SUBMISSION TYPE OF ACTION	
☐ ACIDIZE ☐ ALTER CASING ☐ CASING REPAIR	
NOTICE OF INTENT Approximate date work will start:  CHANGE TO PREVIOUS PLANS  CHANGE TUBING  CHANGE TUBING  CHANGE WELL NAME	
CHANGE WELL STATUS COMMINGLE PRODUCING FORMATIONS CONVERT WELL TYPE	
SUBSEQUENT REPORT Date of Work Completion: FRACTURE TREAT NEW CONSTRUCTION	
☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐	
	ON
Date of Spud:	
U TUBING REPAIR U VENT OR FLARE U WATER DISPOSAL	
□ DRILLING REPORT □ WATER SHUTOFF □ SI TA STATUS EXTENSION ✓ APD EXTENSION Report Date: □	
☐ WILDCAT WELL DETERMINATION ☐ OTHER:	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.  Newfield requests permission to extend the Permit to Drill this well for one	
year. Approved by the	
Utah Division of	
Oil, Gas and Mining	
<b>Date:</b> May 11, 2009	
By: Down Hill	
NAME (PLEASE PRINT) Mandie Crozier PHONE NUMBER Regulatory Tech	
SIGNATURE         DATE           N/A         5/4/2009	



#### The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

**Electronic Permitting System - Sundry Notices** 

## Request for Permit Extension Validation Well Number 43047400310000

**API:** 43047400310000

Well Name: SUNDANCE FED B-12-9-17

Location: 0451 FNL 1939 FEL QTR NWNE SEC 12 TWNP 090S RNG 170E MER S

Company Permit Issued to: NEWFIELD PRODUCTION COMPANY

**Date Original Permit Issued:** 5/5/2008

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

ire revision. Following is a checklist of some items related to the application, which should be verified.
<ul> <li>If located on private land, has the ownership changed, if so, has the surface agreement been updated?</li> <li>Yes</li> <li>No</li> </ul>
• Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location?  Yes No
• Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well?  Yes No
<ul> <li>Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location?  Yes No</li> </ul>
• Has the approved source of water for drilling changed?   Yes  No
• Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation? 💮 Yes 📵 No
• Is bonding still in place, which covers this proposed well?   • Yes   • No Utah Division of Oil, Gas and Mining
- N. H. O. J F/F/0000

**Signature:** Mandie Crozier **Date:** 5/5/2009

Title: Regulatory Tech Representing: NEWFIELD PRODUCTION COMPANY Date: May 11, 2009

Bv:

FORM 3160-5 (August 2007)

UNITED STATES					
DEPARTMENT OF THE INTERIOR					
DIDEALLOF LAND MANAGEMENT					

FORM A	PPROVED
OMB No.	1004-013
Expires: Ju	dv 31.2010

7. If Unit or CA/Agreement, Name and/or GMBU			
8. Well Name and No. SUNDANCE FEDERAL B-12-9-17			
9. API Well No. 4304740031 10. Field and Pool, or Exploratory Area			
GREATER MB UNIT 11. County or Parish, State			
UINTAH, UT			
F NOTICE, OR OTHER DATA ON			
water Shut-Off  water Shut-Off  water Shut-Off  water Shut-Off  water Shut-Off  Well Integrity  other  orarily Abandon  r Disposal			

proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final

On 4/17/10 MIRU Ross # 29. Spud well @ 9:00 AM. Drill 320' of 12 1/4" hole with air mist. TIH W/ 7 Jt's 8 5/8" J-55 24 # csgn. Set @ 319.69 KB. On 4/21/10 cement with 160 sks of class "G" w/ 2% CaCL2 + 1/4# sk Cello- Flake Mixed @ 15.8 ppg > 1.17 cf/ sk yeild. Returned 4 bbls cement to pit. WOC.

I hereby certify that the foregoing is true and correct (Printed/ Typed)	Title								
Rvan Crum	Drilling Foreman	Drilling Foreman							
Signature flyer Count	Date 05/18/2010								
THIS SPACE FOR FEDERAL OR STATE OFFICE USE									
Approved by	Title	Date							
Conditions of approval, if any, are attached. Approval of this notice does not wan certify that the applicant holds legal or equitable title to those rights in the subject which would entitle the applicant to conduct operations thereon.	rant or lease Office	Office							

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious and fraudulent statements or representations as to any matter within its jurisdiction

(Instructions on page 2)

MAY 2 5 2010

## **NEWFIELD PRODUCTION COMPANY - CASING & CEMENT REPORT**

			8 5/8"	CASING SET AT		319.69	_			
LAST CASING DATUM DATUM TO CUT	12		<u>7</u>		WELL	SUNDAN	Newfield   ICE B-12-9- Mon.Butte		Company	
DATUM TO BRA				•		-		Ross Rig #	29	
TD DRILLER					-					
HOLE SIZE		•								
•										
LOG OF CASING	STRING:					·				
PIECES	OD	ITEM - M	AKE - DESC	CRIPTION	WT/FT	GRD	THREAD	CONDT	LENGTH	
1		Well Head					<u> </u>		0.95	
7	8 5/8"	ST&C Casi	ng		24#	J-55	STC	A	307.84	
1		Guide Shoe	9						0.9	
									ļ	
						}			ļ	
									<u> </u>	
							<u> </u>			
			<del>_</del>							
		<u> </u>								
CASING INVENT			FEET	JTS	TOTAL LE				309.69	
TOTAL LENGTH		G	309.69	7	LESS CUT			_	2	
LESS NON CSG			1.85		4		CUT OFF CS	G	319.69	
PLUS FULL JTS		Ī.	0		ICASING S	ET DEPTH	i		313.03	
	<del></del>		307.84	7	łι					
TOTAL CSG. DE	L. (W/O TH	IRDS)	307.84	7	]	ARE				
7					<u> </u>	<del>-</del>				
BEGIN RUN CS	<u>G.</u>	Spud	9:00 AM	4/17/2010						
CSG. IN HOLE			2:00 PM	4/17/2010						
BEGIN CIRC			3:35 PM	4/21/2010	RECIPRO	CATED PIF	No No		į	
BEGIN PUMP C			3:46 PM	4/21/2010	<b></b> .	==-	===			
BEGIN DSPL. C	MT		3:57 PM	4/21/2010	BUMPED I	PLUG TO _	550			

4:04 PM

4/21/2010

PLUG DOWN

CEMENT USED		CEMENT C	OMPANY-	BJ Services
STAGE	# SX	CEMENT T	YPE & ADDITIVE	ES
1	160	Class	"G"+2%CaCl+.25#sk	CelloFlakeMixed@15.8ppgW/
			1.17yield,retu	irned 4bbls to pit
			•	
	<u> </u>			
CENTRALIZER (	& SCRATCH	ER PLACEMENT		SHOW MAKE & SPACING
Middle First, to	p of second	and third for a total of three		
COMPANY REP	RESENTATI	VE Ryan Crum		DATE 4/21/2010

## STATE OF UTAH

	5. LEASE DESIGNATION AND SERIAL NUMBER: USA UTU-39713		
SUNDRY	NOTICES AND REPO	ORTS ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
	Il new wells, significantly deepen existing wells be al laterals. Use APPLICATION FOR PERMIT TO		7. UNIT or CA AGREEMENT NAME: GMBU
1. TYPE OF WELL: OIL WELL			8. WELL NAME and NUMBER: SUNDANCE FEDERAL B-12-9-17
2. NAME OF OPERATOR:			9. API NUMBER:
NEWFIELD PRODUCTION COM	IPANY		4304740031
3. ADDRESS OF OPERATOR:		PHONE NUMBER	10. FIELD AND POOL, OR WILDCAT:
Route 3 Box 3630  4. LOCATION OF WELL:	CITY Myton STATE UT	ZIP 84052 435.646.3721	GREATER MB UNIT
FOOTAGES AT SURFACE: 451' FNL 19	939' FEL		COUNTY: UINTAH
OTR/OTR, SECTION. TOWNSHIP, RANGE.	MERIDIAN: NWNE, 12, T9S, R17E		STATE: UT
II. CHECK APPROF	PRIATE BOXES TO INDICATE	E NATURE OF NOTICE, RE	EPORT, OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
	ACIDIZE	DEEPEN	REPERFORATE CURRENT FORMATION
NOTICE OF INTENT (Submit in Duplicate)	ALTER CASING	FRACTURE TREAT	SIDETRACK TO REPAIR WELL
	CASING REPAIR	NEW CONSTRUCTION	TEMPORARITLY ABANDON
Approximate date work will		=	=
	CHANGE TO PREVIOUS PLANS	OPERATOR CHANGE	TUBING REPAIR
—	CHANGE TUBING	L PLUG AND ABANDON	VENT OR FLAIR
SUBSEOUENT REPORT (Submit Original Form Only)	CHANGE WELL NAME	PLUG BACK	WATER DISPOSAL
	CHANGE WELL STATUS	PRODUCTION (START/STOP)	WATER SHUT-OFF
Date of Work Completion:	COMMINGLE PRODUCING FORMATIONS	RECLAMATION OF WELL SITE	X OTHER: - Weekly Status Report
05/20/2010	CONVERT WELL TYPE	RECOMPLETE - DIFFERENT FORMATION	ON
	MPLETED OPERATIONS. Clearly show a s completed on 05-20-10, attached is		
NAME (PLEASE PRINT) Lucy Chavez-N	aupoto	TITLE Administrative	Assistant
SIGNATURE LUCY	Day Man	DATE 05/24/2010	

(This space for State use only)

**RECEIVED** 

JUN 0 3 2010

### **Daily Activity Report**

## Format For Sundry SUNDANCE B-12-9-17 3/1/2010 To 7/30/2010

5/10/2010 Day: 1

Completion

Rigless on 5/10/2010 - Run CBL and Perf CP 3/CP 5 sands. - Install 5m frac head. NU 6" 5K Cameron BOP. RU hot oil truck & pressure test casing, blind rams, frac head, & casing valves to 4500 psi w/ 2 bw. RU The Perforators LLC WLT w/ mast & run CBL under pressure. WLTD @ 5932' w/ cement top @ 114'. Perforate stage #1, CP 3 sds (5822'-24') w/ 3 1/8" Port plug guns (11 gram .36" EH 16.82" pen) w/ 3 spf for a total of 6 shots, CP5 sds (5705'-13') w/ 3 1/8" port plug guns (11 gram .36" EH 16.82" pen) w/ 3 spf for a total of 24 shots. RD The Peforators LLC WLT. SIW

Daily Cost: \$0

**Cumulative Cost: \$9,208** 

5/14/2010 Day: 2

Completion

Rigless on 5/14/2010 - Frac well. Flow well back. - Stage #3; RU WLT. RIH w/ frac plug & perf quns. Set plug @ 5260'. Perferate A3 sds @ 5160-64', 5146-48', A1 sds @ 5130-35' w/ 3 spf for total of 33 shots. RU BJ & open well w/ 1217 psi on casing. Perfs broke down @ 3908 psi back to 1248 psi. To low of pressure. Pump 30 gals of Techni Hib chemical @ 4% by volume. Frac w/ 100,000#'s of 20/40 sand in 766 bbls of Lghtning 17 frac fluid. Treated @ ave pressure of 2953 w/ ave rate of 47 bpm w/ 8 ppg of sand. Spot 12 bbls of 15% HCL acid in flush for next stage. ISIP was 1617 w/ .75FG. 5 min was 1448. 10 min was 1382. 15 min was 1347. Leave pressure on well. 2071 bbls EWTR. - Stage #6; RU WLT. RIH w/ frac plug & perf guns. Set plug @ 4298'. Perferate GB6 sds @ 4190-98' w/ 3 spf for total of 24 shots. RU BJ & open well w/ 1540 psi on casing. Perfs broke down @ 2792 psi back to 1544 psi. To low to shut down. Pump 30 gals of Techni Hib chemical @ 4% by volume. Frac w/ 12,567#'s of 20/40 sand in 247 bbls of Lghtning 17 frac fluid. Treated @ ave pressure of 2050 w/ ave rate of 33 bpm w/ 6 ppg of sand. ISIP was 1630 w/ .82FG. 5 min was 1486. 10 min was 1467. 15 min was 1454. 3118 bbls EWTR. RD BJ & WLT. Flow well back. Well flowed for 7 hours. SIFN w/ 2118 bbls EWTR. - Stage #5; RU WLT. RIH w/ frac plug & perf guns. Set plug @ 4780'. Perferate D2 sds @ 44728-36', 4718-20' w/ 3 spf for total of 30 shots. RU BJ & open well w/ 1540 psi on casing. Perfs broke down @ 1990 psi back to 1990 psi. To low pressure. Pump 30 gals of Techni Hib chemical @ 4% by volume. Frac w/ 60,000#'s of 20/40 sand in 519 bbls of Lghtning 17 frac fluid. Treated @ ave pressure of 2481 w/ ave rate of 41 bpm w/ 8 ppg of sand. Spot 12 bbls of 15% HCL acid in flush for next stage. ISIP was 1792 w/ .83FG. 5 min was 1659, 10 min was 1637, 15 min was 1621. Leave pressure on well, 2871 bbls EWTR. -Stage #4: RU WLT, RIH w/ frac plug & perf guns. Set plug @ 5060'. Perferate B1 sds @ 4954-60', C sds @ 4832-36' w/ 3 spf for total of 30 shots. RU BJ & open well w/ 1220 psi on casing. Perfs broke down @ 1578 psi back to 1578 psi. To Low pressure. Pump 30 gals of Techni Hib chemical @ 4% by volume. Frac w/ 15,000#'s of 20/40 sand in 281 bbls of Lghtning 17 frac fluid. Treated @ ave pressure of 2700 w/ ave rate of 41 bpm w/ 6 ppg of sand. Spot 12 bbls of 15% HCL acid in flush for next stage. ISIP was 1793 w/ .80FG. 5 min was 1659. 10 min was 1634. 15 min was 1613. Leave pressure on well. 2352 bbls EWTR. - Stage #2; RU Perforators LLC WLT, crane & lubricator. RIH w/ Weatherford 5-1/2" (6K) composite flow through frac plug & perf guns. Set plug @ 5650'. Perferate CP2 sds @ 5613-16', 5606-08', CP1 sds @ 5588-90', 5565-68' w/ 3-1/8" Port Guns (11 gram, .36"EH, 120°, 16.82"pen) w/ 3 spf for total of 30 shots. RU BJ & open well w/ 1180 psi on casing. Perfs broke down @ 2666 psi back to 1648 psi. Pressure to low to shut down. Pump 30 gals of Techni Hib chemical @ 4% by volume. Frac w/ 80,000#'s of 20/40 sand in 652 bbls of Lghtning 17 frac fluid. Treated @ ave pressure of 2514 w/ ave rate of 44 bpm w/ 8 ppg of sand. Spot 12 bbls of 15% HCL

acid in flush for next stage. ISIP was 2022 w/ .80FG. 5 min was 1455. 10 min was 1382. 15 min was 1281. Leave pressure on well. 1305 bbls EWTR. - Stage #1; RU BJ Services "Ram Head" frac flange. RU BJ & open well w/ 120 psi on casing. Perfs broke down @ 3190 psi back to 1493 psi. ISIP was 1385 w/ .67FG. 1 min was 1106. 4 min was 1057. Pump 6 bbls of 15% HCL acid. Pump 30 gals of Techni Hib chemical @ 4% by volume. Frac w/ 45,000#'s of 20/40 sand in 511 bbls of Lghtning 17 frac fluid. Treated @ ave pressure of 2582 w/ ave rate of 44 bpm w/ 8 ppg of sand. Spot 12 bbls of 15% HCL acid in flush for next stage. ISIP was 1632 w/ .72FG. 5 min was 1276. 10 min was 1238. 15 min was 1214. Leave pressure on well. 653 bbls EWTR.

Daily Cost: \$0

Cumulative Cost: \$132,479

#### 5/16/2010 Day: 3

Completion

Leed #731 on 5/16/2010 - MIRUSU. Well flowing oil. - MIRUSU. Open well w/ 125 psi on well. Well flowed for 1.5 hours & turned to oil @ 4;30PM. SIFN w/2000 bbls EWTR. Rec'd 118 bbls.

Daily Cost: \$0

Cumulative Cost: \$133,794

#### 5/17/2010 Day: 4

Completion

Leed #731 on 5/17/2010 - Set kill plug. TIH w/ tbg. - Open well w/ 500 psi on casing. RU Hot Oiler & pump 13 bbls water down casing. RU Perferators LLC WLT w/ lubricator. RIH w/ Weatherford (6K) composite solid plug. Couldn't get past 700'. Pump 20 bbls hot water sown casing. RIH w/ plug & set @ 4140'. RD WLT. RD Cameron BOP's & frac head. Instal 3M production tbg head & Schefer BOP's. RU 4-3/4" Chomp mill & x-over sub. Tally, pickup & TIH w/ new J-55, 2-7/8", 6.5#, 8EUE tbg to tag plug @ 4140'. RU swivel, pump & tanks. Drlg out plug. TIH w/ tbg to tag plug @ 4298'. Drlg out plug #1. TIH w/ tbg to tag 10' of sand on plug @ 4780'. Drlg out plug #2. SIFN w/1890 bbls EWTR.

Daily Cost: \$0

Cumulative Cost: \$169,204

#### 5/18/2010 Day: 5

Completion

Leed #731 on 5/18/2010 - Drlg plugs. C/O to PBTD. Swab well. - Open well w/ psi on casing. TIH w/ tbg to tag plug @ 5060'. Drlg out plug #3. TIH w/ tbg to tag plug @ 5260'. Drlg out plug #4. TIH w/ tbg to plug5650'. Drlg out plug #5. Well making oil. TIH w/ tbg to tag 60' of fill. C/O to PBTD @ 5983'. LD 3 jts tbg. RU swab equipment. Made 10 runs & rec'd 160 bbls of fluid. FFL was 2100'. Last run showed trace of oil & no sand. SIFN w/ 1730 bbls EWTR.

Daily Cost: \$0

Cumulative Cost: \$173,844

#### 5/19/2010 Day: 6

Completion

Leed #731 on 5/19/2010 - TIH w/ tbg & C/O sand. Pump 180 to kill well. TOOH w/ tbg. 60 stds out well flowing. TIH w/tbg. - Open well w/ 500 psi on casing, 900 psi on tbg. TIH w/ tbg to tag 8' of sand. Circulate 180 bbls water. TOOH w/ tbg. 60 stds out well started to flow. Attempt to kill w/ 140 bbls water. TIH w/ tbg to leave EOT @ 5900'. SIFN w/ 1630 bbls EWTR.

Daily Cost: \$0

Cumulative Cost: \$195,489

#### 5/20/2010 Day: 7

Completion

Leed #731 on 5/20/2010 - Kill well. TIH w/ production. Put on pump. - Open well w/ 300 psi on casing. Circulate 110 bbls of 10# brine down casing. Pump 40 bbls down tbg. TOOH w/ tbg. LD mill & x-over sub. TIH w/ NC, 2 jts tbg, SN, 1 jt tbg, TA new Cnrtl Hydrlc w/ 45,000#'s shear, 183 jts tbg. RD BOP's. Set TA @ 5761' w/ 18,000#'s tension w/ SN @ 5793' & EOT @ 5857'. Flush tbg w/ 60 bbls brine. Pick-up & prime pump. TIH w/ 2-1/2" x 1-3/4" x 17' x 24' new Cntrl Hydrlc RHAC pump w/ 224"SL, 4-1-1/2" weight rods, 225-7/8" guided (8per) rods, 6', 2' x 7\8" pony rods, 1-1/2" x 30' polish rod. Space pump. Test tbg & pump to 800 psi. Had B&G crane take 2 weights off unit. POP @ 6PM w/ 5 spm w/ 144"SL w/ 1630 bbls EWTR. Final Report. **Finalized** 

Daily Cost: \$0

**Cumulative Cost:** \$237,833

**Pertinent Files:** Go to File List

Form 3160-4 . (August 2007)

\*(See instructions and spaces for additional data on page 2)

# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED OMB NO. 1004-0137 Expires: July 31, 2010

				BURE	AU OF I	LAND MAI	NA	GEMEN	T							Expires: Jul	y 31, 2010
	w	ELL (	COMF	PLETIC	N OR R	ECOMPLE	TIC	N REP	ORT	AND L	.OG			1	ase Ser -3971		
la. Type of	Wall	1710	Dil Well		as Well	Dry L	Ot	her						6. If	Indian.	Allottee or T	ribe Name
b. Type of	wen Completion		New We	ıı 📙 i	Vork Over	Deepen D	Pl	ug Back	☐ Diff	Resvr.,							
		C	other:											GME	<u> </u>		t Name and No.
2. Name of NEWFIEL	Operator D EXPLOI	RATIO	N CON	/PANY										SUN	DANC		No. AL B-12-9-17
3. Address	1401 17TH S	ST. SUIT	E 1000 C	ENVER, C	O 80202			3a.	Phone 1 35)646-	No. <i>(incl:</i> 3721	ude ar	ea code	)		I Well 47-400		
4. Location						nce with Feder	al re	quirement	's) *	31+1		evi	ewe			d Pool or Exp	oloratory
At surfac	e 451' FN	I. & 19	39' FE	L (NW/N	IE) SEC. 1	2, T9S, R17E	Ε (ι	JTU-397						11. S		R., M., on B	lock and
				_ (	,··	_, ,	•		,	U.	7) 1	451	Y	S	urvey o	or Area SEC.	12, T9S, R17E
At top pro	d. interval r	reported	below	139' FN	L & 1342'	FEL (NW/NE	E) SE	EC. 12, T	9S, R1	7E (UT	TU-39	713)		12. 0	County (	or Parish	13. State
At total de						1, T9S, R17E								UIN.			UT
14. Date Sp 04/17/201	udded			5. Date T 05/02/20	.D. Reached 10				ate Comp	_		2010 to Prod.				ns (DF, RKI 873' KB	3, RT, GL)*
18. Total De		601			19. Plug	g Back T.D.:	MD	5983'	27.7		20. D	epth Br	idge Plug		MD CVD		
21. Type El	ectric & Oth	D <u>591</u> er Mecl	O' nanical L	ogs Run	(Submit copy	of each)	IVE	<u>, , , , , , , , , , , , , , , , , , , </u>	2-1-1		22. V	Was wel	cored?	Z N	, <u> </u>	Yes (Submit	
DUAL INC	GRD, SP	, COM	IP. DE	NŠITY,C	OMP. NE	UTRON,GR,	CAL	IPER, C	мт во	ND	I	Was DST Direction	run? ial Survey	<b>☑</b> N	› □ 2 <b>7</b>	Yes (Submit Yes (Submit	report)
23. Casing	and Liner R	Record	(Report	all string	s set in well,	)		Stage Cer	montor	No	of Sk	. & .	Slurry	Vol I		———Т	
Hole Size	Size/Gra	ade	Wt. (#/fi	t.) To	op (MD)	Bottom (MD	)	Stage Cer Dept			of Ce		(BE		Cem	ent Top*	Amount Pulled
12-1/4"	8-5/8" J-	55 2	24#	0		320'	_			160 CI							
7-7/8"	5-1/2" J-	55	15.5#	0		6007'	_			250 PI					114'		<del></del>
·							-			400 50	)/50 F	702					
							$\dashv$										
							-+	<del></del>							<del></del>		
24. Tubing	Record																D 1 D 1 (167)
Size		Set (ME		cker Dept		Size	$\dashv$	Depth Set	(MD)	Packer I	Depth	(MD)	Siz	e .	Dept	h Set (MD)	Packer Depth (MD)
2-7/8" 25. Producii	EOT@		·   IA (	@ 5759		<del></del>	2	6. Perf	oration I	Record	4	190	)				
23. I Toddor	Formation			T	ор	Bottom	4		orated In				Size	No. F	oles	-	Perf. Status
A) Green I		<u>-</u>						5705-582				.36"		3		30	
B) Green I								5565-561 5130-516				.36"		3		33	
C) Green I							-	4832-496				.36"		3		30	
27. Acid, Fi		atment	Cement	Squeeze	etc.			1002 100	0 0 0	<u> </u>		1.00		<u> </u>		1	
	Depth Inter									Amount a		pe of M	laterial				
5705-5824						20/40 sand ir											
5565-5616						20/40 sand ir s 20/40 sand										<del></del>	
5130-5164						20/40 sand ir						· · · · · · · · · · · · · · · · · · ·					
4832-4960 28. Product		al A		FIAC W/	13000#3	20/40 Sand II	1 37	DDIS OI L	<u>- 191101111</u>	9 17 114							
Date First		Hours	Tes		E .		Wat		Oil Grav Corr. Al	-	Ga	as ravity		luction M		17' x 24' RH	IAC Pump
Produced	0.4.40	Tested	Pro	duction			BBL 41	•	Con. Ai	-1	\omega_i	avity	2-1	14 X I-C	)/ <del>-</del> 4 ∧ 1	17 X 24 IXI	IAO I dilip
5-19-10 Choke	6-1-10 Tbg. Press.	Csg.	24	Hr.	51 Oil	Gas	Wate	er	Gas/Oil		W	ell Statu	IS				
Size	Flwg.	Press.	Rat			1	BBL		Ratio		1	RODU					
- -	SI		-	<b>→</b>													
28a. Produc	tion - Interv				lo:		107 ·		hil C-	.i	Ga		Dec	luction M	ethod		
Date First Produced	Test Date	Hours Tested	Tes Pro				Wate BBL		Oil Grav Corr. Al			avity	FIOC	addion M	unou		
			-	<b>→</b>													
	Tbg. Press.		24				Wate BBL		Gas/Oil Ratio		W	ell Statu	ıs			n=1	CEIVED
Size	Flwg.	Press.	Rat	C	BBL	MCF	ונוטון	,	μναιισ		1					P-7 3- 3	

JUN 2 1 2010

001 D I	Yorko	musl C					<del></del>				
286. Prod Date First	uction - Inte	Hours	Test	Oil	Gas	Water	Oil Grav		Gas	Production Method	
Produced		Tested	Production	BBL	MCF	BBL	Corr. AP	1 (	Gravity		
Choke	Tbg. Press.	Cea	24 Hr.	Oil	Gas	Water	Gas/Oil		Well Status	<u> </u>	
Size	Flwg.	Press.	Rate	BBL	MCF	BBL	Ratio				
	SI		<b>→</b>								
	uction - Inte			10.11	10	Water	Oil Grav	ity k	Gas	Production Method	
Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Corr. AP		Gravity		
11044004			-								
Choke	Tbg. Press.	Csg.	24 Hr.	Oil	Gas	Water	Gas/Oil		Well Status		
Size	Flwg. SI	Press.	Rate	BBL	MCF	BBL	Ratio				
		<u> </u>		<u></u>							
29. Dispo	sition of Ga	s (Solid, u	sed for fuel, ve	ented, etc.	,						
	SED FOR FUE		(To alorda A mor	(fama):					31. Formati	on (Log) Markers	
			(Include Aqu								
Show	all importan	t zones of	porosity and c	ontents th	nereof: Cored	intervals and al ing and shut-in	ll drill-stem te pressures and	ests, d	GEOLOG	ICAL MARKERS	
recove		ici vai icsii	ou, cusinon as	ou, mino u	ж. орын, то		1				
-		T									Тор
For	mation	Тор	Bottom		Des	criptions, Cont	tents, etc.			Name	Meas. Depth
		<del> </del>							GARDEN GL	JLCH MRK	3674'
			1						GARDEN GL		3853'
									GARDEN GU	JLCH 2	3968'
									POINT 3		4224'
			ļ						X MRKR		4474' 4510'
									Y MRKR		
									DOUGALS O		4641' 4885'
									B LIMESTON	N MRK	5010'
4:									CASTLE PE		5485'
									BASAL CARI	BONATE	5908'
									<u> </u>		
			e plugging pro			,		£ 00/40 aa	nd in 265 h	obls of Lightning 17 fluid	
Stage 5	: Green R	liver For	mation (D2)	4718-4	736', .36" 3/						
Stage 5	: Green R	liver Form	mation (GB6	) 4190-	4198', .36" 3	3/24 Frac v	<i>∾</i> / 12567#'s	of 20/40 s	and in 80	bbls of Lightning 17 fluid	
J											
			1	h., mlanin	a a sheek in th	e annronriate h	poxes.				
						ne appropriate b	_	T DOT D		✓ Directional Survey	
			gs (1 full set red			Geologic Rep	_	DST Repo		<del></del>	
☐ Su	ndry Notice	for pluggir	g and cement v	erification	-	Core Analysis			illing Daily		
34. I her	eby certify t	hat the for	regoing and at	tached in	formation is co	omplete and cor	rrect as deterr	mined from	all available	records (see attached instructions	) <sup>.</sup>
	Name (pleas	se print) <u>L</u>	ucy Chavez	-Naupo	to		Title A	dministrat	ive Assista	nt	· · · · · · · · · · · · · · · · · · ·
	Signature	Lu	eg Cle	1	(A)		Date 06	5/15/2010			
	/			V.	<u>′</u>		1	nowingly as	d willfully t	o make to any department or agen	acy of the United States any
Title 18 false, fic	U.S.C. Secti titious or fra	on 1001 a audulent st	nd Title 43 U. atements or re	S.C. Secti presentat	ion 1212, mak ions as to any	e it a crime for matter within it	ts jurisdiction	nowingly at	winidity t	o make to any department or agen	
											(Form 3160-4, page 2)

(Continued on page 3)



## **NEWFIELD EXPLORATION**

USGS Myton SW (UT) SECTION 12 TS9 R17E B-12-9-17

Wellbore #1

**Design: Actual** 

## **Standard Survey Report**

07 June, 2010





#### **HATHAWAY BURNHAM**

Survey Report



Company: Project:

NEWFIELD EXPLORATION USGS Myton SW (UT)

Site:

SECTION 12 TS9 R17E

Well:

B-12-9-17

Wellbore:

Wellhore #1

Design:

Actual

Local Co-ordinate Reference:

TVD Reference:

MD Reference: North Reference:

**Survey Calculation Method:** 

Database:

Well B-12-9-17

WELL @ 5023.0ft (NEWFIELD RIG) WELL @ 5023.0ft (NEWFIELD RIG)

Minimum Curvature

EDM 2003.21 Single User Db

**Project** 

USGS Myton SW (UT), DUCHESNE COUNTY, UT, USA

Map System:

US State Plane 1983

Geo Datum: Map Zone:

North American Datum 1983

Utah Central Zone

System Datum:

Mean Sea Level

Site

SECTION 12 TS9 R17E

Site Position:

Мар

Northing: Easting:

7,188,976.16ft

Latitude:

40° 2' 43.238 N

**Position Uncertainty:** 

**Slot Radius:** 

2,072,942.34ft

Longitude:

0.0 ft

**Grid Convergence:** 

109° 57' 17.709 W

0.99°

Well

From:

B-12-9-17, SHL LAT 40 03 05.19 LONG -109 57 08.84

Well Position

+N/-S +E/-W

0.0 ft 0.0 ft Northing: Easting:

7,191,208.91 ft 2,073,593.49 ft

(°)

Latitude: Longitude:

40° 3' 5.190 N 109° 57' 8.840 W

**Position Uncertainty** 

0.0 ft

Wellhead Elevation:

5.023.0 ft

**Ground Level:** 

5.011.0 ft

Wellbore

Wellbore #1

Magnetics

**Model Name** 

Sample Date

Declination

Dip Angle (°)

Field Strength (nT)

**IGRF2010** 

2010/04/22

11.42

65.85

52,407

Design

Actual

**Audit Notes:** 

Version:

1.0

Phase:

ACTUAL

Tie On Depth:

0.0

Vertical Section:

Depth From (TVD) (ft) 0.0

+N/-S (ft) 0.0

+E/-W (ft) 0.0

Direction (°) 63.75

**Survey Program** 

Date 2010/06/07

From (ft)

To (ft)

Survey (Wellbore)

**Tool Name** 

Description

422.0

6,016.0 Survey #1 (Wellbore #1)

MWD

MWD - Standard

Survey

Measured			Vertical			Vertical	Dogleg	Build	Turn	
Depth (ft)	Inclination (°)	Azimuth (°)	Depth (ft)	+N/-S (ft)	+E/-W (ft)	Section (ft)	Rate (°/100ft)	Rate (°/100ft)	Rate (°/100ft)	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00	
422.0	0.55	60.38	422.0	1.0	1.8	2.0	0.13	0.13	0.00	
452.0	0.44	62.31	452.0	1.1	2.0	2.3	0.37	-0.37	6.43	
514.0	0.83	59.03	514.0	1.5	2.6	3.0	0.63	0.63	-5.29	
545.0	1.00	57.40	545.0	1.7	3.0	3.5	0.55	0.55	-5.26	
575.0	1.30	53.40	575.0	2.1	3.5	4.1	1.03	1.00	-13.33	
605.0	1.70	53.10	605.0	2.5	4.1	4.8	1.33	1.33	-1.00	
636.0	2.20	51.10	636.0	3.2	5.0	5.9	1.63	1.61	-6.45	
667.0	2.70	53.50	666.9	4.0	6.0	7.2	1.65	1.61	7.74	
698.0	3.20	54.90	697.9	4.9	7.3	8.7	1.63	1.61	4.52	
728.0	3.40	59.60	727.8	5.9	8.8	10.4	1.12	0.67	15.67	
759.0	3.70	63.00	758.8	6.8	10.4	12.4	1.18	0.97	10.97	
789.0	3.90	63.60	788.7	7.7	12.2	14.4	0.68	0.67	2.00	



#### **HATHAWAY BURNHAM**

Survey Report



Company: Project:

**NEWFIELD EXPLORATION** 

USGS Myton SW (UT)

Site:

SECTION 12 TS9 R17E

Well: Wellbore: B-12-9-17 Wellbore #1

Design: Actual

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference:

Survey Calculation Method:

Database:

Well B-12-9-17

WELL @ 5023.0ft (NEWFIELD RIG) WELL @ 5023.0ft (NEWFIELD RIG)

VVELL (

Minimum Curvature

EDM 2003.21 Single User Db

Survey

820.0 4.10 66.40 819.6 8.6 14.2 16.5 851.0 4.50 65.90 850.5 9.5 16.3 18.8 882.0 4.90 68.70 881.4 10.5 18.6 21.4 913.0 5.30 70.10 912.3 11.5 21.2 24.1 945.0 5.70 72.80 944.2 12.4 24.1 27.1 977.0 6.00 72.90 976.0 13.4 27.2 30.4 1,008.0 6.40 73.90 1,006.8 14.4 30.5 33.7 1,040.0 6.60 72.50 1,038.6 15.4 33.9 37.2 1,072.0 7.00 70.50 1,070.4 16.6 37.5 41.0 1,104.0 7.40 68.50 1,102.1 18.0 41.3 45.0 1,135.0 8.00 67.50 1,132.9 19.6 45.1 49.1	Rate °/100ft)  0.90 1.30 1.49 1.35 1.49 0.94 1.34 0.80	Rate (°/100ft) 0.65 1.29 1.29 1.29 1.25 0.94 1.29	Rate (°/100ft) 9.03 -1.61 9.03 4.52 8.44
820.0       4.10       66.40       819.6       8.6       14.2       16.5         851.0       4.50       65.90       850.5       9.5       16.3       18.8         882.0       4.90       68.70       881.4       10.5       18.6       21.4         913.0       5.30       70.10       912.3       11.5       21.2       24.1         945.0       5.70       72.80       944.2       12.4       24.1       27.1         977.0       6.00       72.90       976.0       13.4       27.2       30.4         1,008.0       6.40       73.90       1,006.8       14.4       30.5       33.7         1,040.0       6.60       72.50       1,038.6       15.4       33.9       37.2         1,072.0       7.00       70.50       1,070.4       16.6       37.5       41.0         1,104.0       7.40       68.50       1,102.1       18.0       41.3       45.0         1,135.0       8.00       67.50       1,132.9       19.6       45.1       49.1	1.30 1.49 1.35 1.49 0.94 1.34	1.29 1.29 1.29 1.25 0.94	-1.61 9.03 4.52
851.0     4.50     65.90     850.5     9.5     16.3     18.8       882.0     4.90     68.70     881.4     10.5     18.6     21.4       913.0     5.30     70.10     912.3     11.5     21.2     24.1       945.0     5.70     72.80     944.2     12.4     24.1     27.1       977.0     6.00     72.90     976.0     13.4     27.2     30.4       1,008.0     6.40     73.90     1,006.8     14.4     30.5     33.7       1,040.0     6.60     72.50     1,038.6     15.4     33.9     37.2       1,072.0     7.00     70.50     1,070.4     16.6     37.5     41.0       1,104.0     7.40     68.50     1,102.1     18.0     41.3     45.0       1,135.0     8.00     67.50     1,132.9     19.6     45.1     49.1	1.49 1.35 1.49 0.94 1.34	1.29 1.29 1.25 0.94	9.03 4.52
882.0       4.90       68.70       881.4       10.5       18.6       21.4         913.0       5.30       70.10       912.3       11.5       21.2       24.1         945.0       5.70       72.80       944.2       12.4       24.1       27.1         977.0       6.00       72.90       976.0       13.4       27.2       30.4         1,008.0       6.40       73.90       1,006.8       14.4       30.5       33.7         1,040.0       6.60       72.50       1,038.6       15.4       33.9       37.2         1,072.0       7.00       70.50       1,070.4       16.6       37.5       41.0         1,104.0       7.40       68.50       1,102.1       18.0       41.3       45.0         1,135.0       8.00       67.50       1,132.9       19.6       45.1       49.1	1.35 1.49 0.94 1.34	1.29 1.25 0.94	4.52
913.0 5.30 70.10 912.3 11.5 21.2 24.1 945.0 5.70 72.80 944.2 12.4 24.1 27.1 977.0 6.00 72.90 976.0 13.4 27.2 30.4 1,008.0 6.40 73.90 1,006.8 14.4 30.5 33.7 1,040.0 6.60 72.50 1,038.6 15.4 33.9 37.2 1,072.0 7.00 70.50 1,070.4 16.6 37.5 41.0 1,104.0 7.40 68.50 1,102.1 18.0 41.3 45.0 1,135.0 8.00 67.50 1,132.9 19.6 45.1 49.1	1.49 0.94 1.34	1.25 0.94	
945.0     5.70     72.80     944.2     12.4     24.1     27.1       977.0     6.00     72.90     976.0     13.4     27.2     30.4       1,008.0     6.40     73.90     1,006.8     14.4     30.5     33.7       1,040.0     6.60     72.50     1,038.6     15.4     33.9     37.2       1,072.0     7.00     70.50     1,070.4     16.6     37.5     41.0       1,104.0     7.40     68.50     1,102.1     18.0     41.3     45.0       1,135.0     8.00     67.50     1,132.9     19.6     45.1     49.1	0.94 1.34	0.94	
977.0 6.00 72.90 976.0 13.4 27.2 30.4 1,008.0 6.40 73.90 1,006.8 14.4 30.5 33.7 1,040.0 6.60 72.50 1,038.6 15.4 33.9 37.2 1,072.0 7.00 70.50 1,070.4 16.6 37.5 41.0 1,104.0 7.40 68.50 1,102.1 18.0 41.3 45.0 1,135.0 8.00 67.50 1,132.9 19.6 45.1 49.1	1.34		0.31
1,040.0 6.60 72.50 1,038.6 15.4 33.9 37.2 1,072.0 7.00 70.50 1,070.4 16.6 37.5 41.0 1,104.0 7.40 68.50 1,102.1 18.0 41.3 45.0 1,135.0 8.00 67.50 1,132.9 19.6 45.1 49.1			3.23
1,072.0 7.00 70.50 1,070.4 16.6 37.5 41.0 1,104.0 7.40 68.50 1,102.1 18.0 41.3 45.0 1,135.0 8.00 67.50 1,132.9 19.6 45.1 49.1	0.80		
1,104.0 7.40 68.50 1,102.1 18.0 41.3 45.0 1,135.0 8.00 67.50 1,132.9 19.6 45.1 49.1	4 45	0.63 1.25	-4.38 -6.25
1,135.0 8.00 67.50 1,132.9 19.6 45.1 49.1	1.45 1.47	1.25	-6.25
1,135.0	1.98	1.94	-3.23
	1.00	0.94	-2.50
1,107.0	1.35	0.97	-6.45
1,198.0 8.60 64.70 1,195.2 23.2 53.5 58.2 1,230.0 9.00 64.90 1,226.8 25.3 57.9 63.1	1.25	1.25	0.63
1,250.0	0.63	0.63	0.63
1,202.0	1.81	1.56	-5.63
1,204.0	0.96	0.65	-4.19
1,323.0 3.30 32.30 1,323.0 2.3	0.58	0.31	-2.81
1,007.0	0.16	0.00	-0.94
1,309.0	0.11	0.00	-0.65
1,420.0	0.91	0.63	-3.75
1,452.0 10.20 59.40 1,445.6 42.9 91.2 100.7 1,547.0 11.30 61.60 1,538.9 51.6 106.6 118.4	1.24	1.16	2.32
1,0110	0.27	0.11	-1.26
1,042.0	0.97	0.95	0.95
1,737.0 12.30 61.30 1,725.0 70.2 140.0 136.6 1,832.0 12.00 61.20 1,817.9 79.8 157.5 176.6	0.32	-0.32	-0.11
1,927.0 11.30 62.20 1,911.0 88.9 174.4 195.7	0.77	-0.74	1.05
2,022.0 11.82 62.07 2,004.0 97.8 191.2 214.8	0.55	0.55	-0.14
2,118.0 12.30 61.50 2,097.9 107.3 208.9 234.8	0.52	0.50	-0.59
2 2 1 2 0 1 1 7 0 5 9 3 0 2 1 8 9 . 9 1 1 6 . 9 2 2 5 . 9 2 5 4 . 3	0.80	-0.64	-2.34
2,307.0 11,30 61,70 2,283.0 126.3 242.4 273.2	0.66	-0.42	2.53
2,403.0 11.90 61.90 2,377.0 135.4 259.4 292.5	0.63	0.63	0.21 0.21
2,497.0 11.80 62.10 2,469.0 144.5 276.4 311.8	0.12	-0.11	
2,592.0 11.50 61.10 2,562.0 153.6 293.3 331.0	0.38	-0.32	-1.05 -2.71
2 688 0 9 90 58.50 2.656.4 162.5 308.7 348.8	1.74	-1.67	-2.71 2.21
2,784.0 9.84 60.62 2,750.9 170.9 322.9 365.2	0.38 0.54	-0.06 0.38	2.19
2,079.0 10.20 02.10 2,07.0	1.89	1.84	2.28
2,973.0		-0.66	-2.46
3,068.0 11.30 62.50 3,029.8 195.1 370.8 418.8	0.83		1.05
3,163.0 12.70 63.50 3,122.7 204.1 388.4 438.6 3,259.0 13.10 62.00 3.215.3 213.8 407.2 459.8	1.49 0.55	1.47 0.42	-1.58
3,230.0 13.10 02.00 3,230.0	0.86	-0.53	-3.05
3,333.0 (2.00 00.10 0,001.0	0.40	-0.11	1.79
3,440.0	0.74	0.63	1.77
3,544.0 13.10 62.50 3,494.3 244.6 462.2 522.7 3,638.0 12.40 63.90 3.586.0 253.9 480.7 543.5	0.74	-0.74	1.49
3,000.0 12.10 30.00 1 000.4 400.0 564.1	0.13	0.00	-0.63
3,734.0 12.40 00.00 0,070	0.67	0.64	0.96
3,828.0 13.00 64.20 3,771.4 272.3 517.7 584.8 3,922.0 13.80 65.00 3,862.9 281.6 537.4 606.5	0.87	0.85	0.85
5,522.0	0.62	-0.52	-1.44
4,019.0	0.44	0.21	-1.68
4,114.0	0.12	-0.11	0.21
4,209.0 13.40 62.20 4,142.0 311.8 597.0 675.4 4,304.0 12.90 63.10 4,234.5 321.8 616.2 695.0	0.57	-0.53	0.95
4,399.0 11.60 61.30 4,327.3 331.2 634.0 715.1	1.43	-1.37	-1.89
7,000	0.34	-0.21	-1.35
4,495.0 11.40 60.00 4,421.4 340.5 650.7 734.2 4,590.0 12.06 62.33 4,514.4 349.8 667.6 753.5	0.86	0.69	2.45



#### **HATHAWAY BURNHAM**

Survey Report



Company:

**NEWFIELD EXPLORATION** 

Project:

USGS Myton SW (UT) SECTION 12 TS9 R17E

Site: Well: Wellbore:

B-12-9-17 Wellbore #1

Wellbore Actual

Local Co-ordinate Reference:

TVD Reference:

MD Reference:

North Reference: Survey Calculation Method:

Database:

Well B-12-9-17

WELL @ 5023.0ft (NEWFIELD RIG)

WELL @ 5023.0ft (NEWFIELD RIG)

True

Minimum Curvature

EDM 2003.21 Single User Db

## Design: Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
4,685.0	12.10	62.20	4,607.3	359.1	685.2	773.4	0.05	0.04	-0.14
4,779.0	12.30	61.40	4,699.2	368.5	702.7	793.2	0.28	0.21	-0.85
4,874.0	12.20	61.90	4,792.0	378.1	720.5	813.4	0.15	-0.11	0.53
4,969.0	11.80	62.70	4,884.9	387.2	738.0	833.1	0.46	-0.42	0.84
5,064.0	11.30	60.10	4,978.0	396.3	754.7	852.1	0.76	-0.53	-2.74
5,160.0	11.98	65.90	5,072.0	405.1	771.9	871.5	1.41	0.71	6.04
5,254.0	12.60	64.60	5,163.9	413.5	790.1	891.5	0.72	0.66	-1.38
5,285.8	12.70	64.70	5,195.0	416.5	796.4	898.4	0.32	0.31	0.32
B-12-9-17	TGT								
5,350.0	12.90	64.90	5,257.5	422.5	809.2	912.7	0.32	0.31	0.31
5,445.0	11.60	66.90	5,350.4	430.8	827.6	932.8	1.44	-1.37	2.11
5.541.0	12.10	62.40	5,444.3	439.2	845.4	952.5	1.09	0.52	-4.69
5,636.0	13.30	62.10	5,537.0	448.9	863.9	973.4	1.27	1.26	-0.32
5,731.0	12.40	63.40	5,629.6	458.6	882.7	994.5	0.99	-0.95	1.37
5,825.0	11.70	63.40	5,721.5	467.4	900.2	1,014.1	0.74	-0.74	0.00
5,921.0	9.62	64.97	5,815.9	475.2	916.2	1,031.9	2.19	-2.17	1.64
5,950.0	9.07	66.02	5,844.5	477.1	920.5	1,036.6	1.99	-1.90	3.62
6,000.0	9.07	66.02	5,893.9	480.3	927.7	1,044.5	0.00	0.00	0.00
6,016.0	9.07	66.02	5,909.7	481.3	930.0	1,047.0	0.00	0.00	0.00

#### **Wellbore Targets**

Target I	Name
----------	------

<ul><li>hit/miss target</li><li>Shape</li></ul>	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
B-12-9-17 TGT	0.00	0.99	5.200.0	387.3	785.5	7,191,609.78	2,074,372.16	40° 3' 9.018 N	109° 56' 58.738 W

- actual wellpath misses by 31.5ft at 5285.8ft MD (5195.0 TVD, 416.5 N, 796.4 E)

- Circle (radius 75.0)

Checked By:	Approved By:	Date:
Checked by.	, ippiorou 5).	



Project: USGS Myton SW (UT) Site: SECTION 12 TS9 R17E

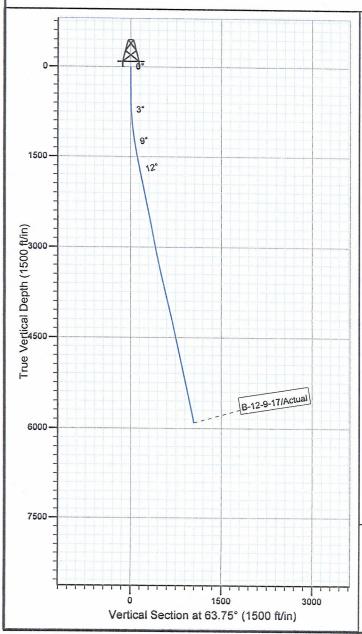
Well: B-12-9-17 Wellbore: Wellbore #1 SURVEY: Actual

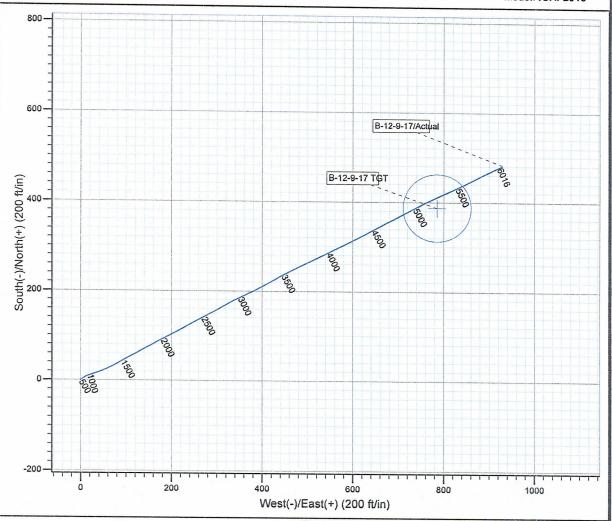
FINAL SURVEY REPORT



Azimuths to True North Magnetic North: 11.42°

Magnetic Field Strength: 52407.1snT Dip Angle: 65.85° Date: 2010/04/22 Model: IGRF2010







Design: Actual (B-12-9-17/Wellbore #1)

Created By: Jim hudson Date: 21:08, June 07 2010
THIS SURVEY IS CORRECT TO THE BEST OF MY
KNOWLEDGE AND IS SUPPORTED BY ACTUAL FIELD DATA.

### **Daily Activity Report**

Format For Sundry SUNDANCE B-12-9-17 2/1/2010 To 6/30/2010

#### **SUNDANCE B-12-9-17**

**Waiting on Cement** 

**Date:** 4/23/2010

Ross #29 at 320. Days Since Spud - skCelloFlakeMixed@15.8ppgW/1.17yield,returned 4bbls to pit. - 4/21/10 Run 7 jts8 5/8" csg. ( Guide Shoe, Shoe Jt. Baffle Plate, 6jts ) Set @ 319.69' KB - Spud on 4/17/10 W/ Ross #29 @ 9:00AM. Drilled 320' of 12 1/4" hole. - On 4/21/10 Cemented 8 5/8" Casing W/ BJ. Pumped 160sks Class "G"+2%CaCl+.25#

Daily Cost: \$0

Cumulative Cost: \$33,017

#### **SUNDANCE B-12-9-17**

Rigging Up

**Date:** 4/29/2010

NDSI #2 at 320. 0 Days Since Spud - On 4/29/10 @ 1:00 PM - Rig Down Perpair Rig For Move To B-12-9-17 - 24 Hr Notice Sent To BLM State via email On 2/28/10 Of Rig Move On 4/29/10 @ 7:00 AM And Bop Test

Daily Cost: \$0

Cumulative Cost: \$34,121

#### **SUNDANCE B-12-9-17**

Drill 7 7/8" hole with fresh water

**Date:** 4/30/2010

NDSI #2 at 1756. 1 Days Since Spud - 1X3.31' Gap Sub, 1X2.58' Antenna Sub, 1X30.58' Monel, 26HWDP - Drill 7 7/8" hole F/ 319' to 1756' W/ 20,000 WOB, 151 TRPM, 355 GPM 119fph avg ROP. - ten minutes, test surface csg to 1,500 PSI for 30 minutes all tested good. - Rig Up B&C Quicktest. Test Kelly, Safety Valve, Pipe, blind Rams and Choke, to 2,000PSI for - MIRU on the Sundance Federal B-12-9-17 - Pick up BHA as follows Smith MI616 7 7/8" PDC bit, 6.5" hunting .33 1.5° Mud Motor, 1X30.20 Monel,

Daily Cost: \$0

**Cumulative Cost: \$76,250** 

#### **SUNDANCE B-12-9-17**

Drill 7 7/8" hole with fresh water

**Date:** 5/1/2010

NDSI #2 at 4354. 2 Days Since Spud - Rig Service, Function Test BOP and Crown-O-Matic, Grease Crown, Blocks, Swivel, and Kelly Spinners - Drill 7 7/8" hole F/1756' to 3023' W/20,000 WOB, 151 TRPM, 355 GPM 113fph avg ROP. - Drill 7 7/8" hole F/ 3023' to 4354' W/20,000 WOB, 151 TRPM, 355 GPM 113fph avg ROP.

Daily Cost: \$0

**Cumulative Cost:** \$116,262

#### **SUNDANCE B-12-9-17**

Drill 7 7/8" hole with fresh water

**Date:** 5/2/2010

NDSI #2 at 6016. 3 Days Since Spud - Drill 7 7/8" hole F/ 4354' to 5051' W/ 25,000 WOB, 151 TRPM, 355 GPM 98,000 fph avg ROP. - Drill 7 7/8" hole F/ 5051' to 6016' W/ 25,000 WOB, 151 TRPM, 355 GPM 98,000 fph avg ROP. - Circulate F/ Logs - Rig Service, Function Test BOP and Crown-O-Matic, Grease Crown, Blocks, Swivel, and Kelly Spinners  $\bf Finalized$ 

Daily Cost: \$0

Cumulative Cost: \$158,386

#### **SUNDANCE B-12-9-17**

**Wait on Completion** 

**Date:** 5/3/2010

NDSI #2 at 6016. 4 Days Since Spud - Laydown Drill pipe - Pump 260bbls of brine - Laydown Drillpipe and BHA - R/U PSI and Run Wireline Logs - Test 5 1/2" Casing Rams - Rig up casing Crew and Run 138 jts 5 1/2" Casing - Circulate F/ Logs - Cement W/ 250 sks PL11+3% KCL+5#CSE+.05#CF+2#KOL+5SMS+FP+SF Mixed @ 11ppg W/ 3.50 yield - 400sks 50:50:2+3%KCL+.5%EC-1+.25#CF+.5#SF+3SMS+FP-6L Mixed @ 14.4 ppg W 1.24 yield - Returned 30 bbls of cement to pit. - Nipple down BOP set slips W/ 75,000 tension - Clean Mud tanks - Release Rig @ 3:30 AM 5/3/10 - Rig up BJ hardlines and circulate casing W/ Rig pump

Finalized

Daily Cost: \$0

Cumulative Cost: \$255,692

Pertinent Files: Go to File List